John James
Surgeon
207
1678

A

TREATISE

ON

GONORRHŒA VIRULENTA,

AND

LUES VENEREA.

G. Hargrave *179*

A

TREATISE

ON

GONORRHŒA VIRULENTA,

AND

LUES VENEREA.

BY

BENJAMIN BELL,

MEMBER OF THE ROYAL COLLEGES OF SURGEONS
OF IRELAND AND EDINBURGH,
ONE OF THE SURGEONS TO THE ROYAL INFIRMARY,
AND FELLOW OF THE ROYAL SOCIETY OF EDINBURGH.

VOLUME I.

EDINBURGH:
Printed for JAMES WATSON and Co. and G. MUDIE;
AND
J. MURRAY, No. 32, Fleet-Street, London.
M,DCC,XCIII.

L9F:4
1793.1

TO

Doctor WILLIAM SANDERS,

Senior PHYSICIAN to GUY'S HOSPITAL,

Fellow of the ROYAL COLLEGE of PHYSICIANS, London,

And of the ROYAL SOCIETY of Edinburgh,

Theſe VOLUMES are reſpectfully dedicated, as a ſmall teſtimony of regard, and of public acknowledgement, for the advantages which have been derived from his various exertions to promote the extenſion and general utility of Medical Science, by

His obedient,

And very humble Servant,

BENJ^N. BELL.

EDINBURGH,
1ſt Nov. 1792.

Sur Fojin Aagàl. 1809

PREFACE.

As many of the ſymptoms of Gonorrhœa and Lues Venerea become frequent objects of the ſurgeon's attention, I at one time meant to have introduced a treatiſe on theſe diſeaſes in the Syſtem of Surgery publiſhed ſome years ago, but I was prevented from doing ſo, by different publications upon the ſame ſubject being announced about the ſame period.

As theſe works have ſince made their appearance, and, as ſome of them have been very favourably received, it may be imagined, that farther writings upon this ſubject can ſcarcely at preſent be required. It muſt indeed be admitted that many valuable publications have come forth within theſe few years upon this branch of the

profeſſion; particularly one by Mr. John Hunter of London, intituled, a Treatiſe on the Venereal Diſeaſe; and another intituled, Practical Obſervations on Venereal Complaints, by Doctor Swediaur. But although much information may be obtained from both of theſe works, as well as from ſome other late publications upon this ſubject, there is ſtill much left for others to elucidate. Such is the effect of experience and obſervation, that farther advantages are daily accruing from the labours of individuals in the treatment of this as well as of almoſt every other diſeaſe; and as this I hope will in ſome degree appear from the preſent publication, ſo I ſhall ſtill expect to find that the future endeavours of others will prove yet more ſucceſsful.

Among other points which I have more particularly attempted to elucidate, the treatment of Gonorrhœa by injections,

tions, and the quantity of mercury to be exhibited in Lues Venerea, are, perhaps, the moſt important; and I flatter myſelf that I have given views concerning them, which, in practice, will be found to merit attention. The cure of Gonorrhœa by injections is, no doubt, very univerſally practiſed; but while in a great proportion of caſes it proves ſucceſsful, in others it fails entirely: The cauſe of this, ſo far as I know, has never hitherto been explained. Whether I may have conveyed an adequate idea of my opinion upon this point I cannot poſitively ſay; but the obſervations upon which it is founded are ſuch, that all who pay attention to the ſubject may be enabled readily to aſcertain ſuch caſes as will yield to injections, as well as thoſe in which no advantage is to be expected from them.

The opinion which I have ventured to ſupport, of the difference between the matter

matter of Gonorrhœa, and that of Lues Venerea, will no doubt be cenſured by many. They ought, however, to recollect, in matters of opinion, which cannot be proved by demonſtration, that ſome uncertainty muſt always take place; and before cenſuring with ſeverity the opinions which others may ſuggeſt, they ſhould conſider whether their own may not be equally liable to objection. To me it appears that the reaſons which I have adduced in ſupport of my opinion are very concluſive, but I ſhall make full acknowledgment of my error, if ſufficient reaſons ſhall ever be given to ſhow that it is ill founded. In the mean time, it will be perceived, that the theory which I have adopted does not lead to any deviation from the practice which now generally prevails upon this point, while it ſerves to explain more clearly than the opinion which has commonly prevailed, ſeveral of the phenomena of the two diſeaſes, as

well as the caufe of different remedies being neceffary for each of them.

I do not expect that practitioners of experience and obfervation will derive much information from this publication, but I am hopeful that beginners will derive fome advantage from it; for it has been equally my defire to exhibit a correct view of the different fymptoms of which I treat, and to point out the method of cure in a manner that will be clear and intelligible. Where theory is ever admitted, it is chiefly with a view to explain, upon rational principles, fuch points as the ingenuity of fome fpeculative writers have tended to render intricate.

CONTENTS.

CHAPTER I.

Page

Consideration of the Question, Whether Gonorrhœa and Lues Venerea originate from the same Contagion, - 1

CHAPTER II.

Of Gonorrhœa Virulenta.

SECTION I.

General Observations on the Symptoms, Causes, and Seat of Gonorrhœa Virulenta, - - - 44

SECTION II.

Of the Prognosis in Gonorrhœa Virulenta, 66

SECTION III.

General Observations on the Cure of Gonorrhœa, - - - - 71

SECTION IV.

Of the First Stage of Gonorrhœa, - 82

SEC-

SECTION V.

Page

Of the Second Stage of Gonorrhœa, - 107

SECTION VI.

Of the Third Stage of Gonorrhœa, - 121

SECTION VII.

Of the Fourth Stage of Gonorrhœa, - 137

SECTION VIII.

Of Chordee, - - - 148

SECTION IX.

Of Hæmorrhages from the Urethra, - 154

SECTION X.

Of Gonorrhœa in Women, - - 157

SECTION XI.

Recapitulation, - - - 167

CHAPTER III.

Of the Confequences of Gonorrhœa Virulenta.

SECTION I.

General Remarks on the Confequences of Gonorrhœa, - - - 174

SECT-

SECTION II.

Page

Of Gleets, - - - 176

SECTION III.

Of Impotency from Seminal Weakneſs, - 218

SECTION IV.

Of Obſtructions in the Urethra from Gonorrhœa Virulenta, - - - 235

§ 1. *Of Tumors in the Urethra and contiguous Parts*, - - - 236

§ 2. *Of Spaſmodic Obſtructions in the Urethra*, - - - 241

§ 3. *Of Caruncles in the Urethra*, 254

§ 4. *Of Obſtructions in the Urethra from Strictures, properly ſo called; of Bougies, and Fiſtulæ in Perineo*, 258

SECTION V.

Of Deranged Senſations in the Bladder, Urethra, and contiguous Parts, - 309

SECTION VI.

Of Swellings of the Teſticles, - 332

SECTION VII.

Page

Of Swellings of the Spermatic Cord, - 359

SECTION VIII.

Of Swellings of the Lymphatic Vessels of the Penis, - - - 364

SECTION IX.

Of Swellings of the Glands of the Groin, 372

SECTION X.

Of Excoriations of the Glans and Prepuce, 378

SECTION XI.

Of Excoriations in the Parts of Generation in Women, - - - 388

SECTION XII.

Of Phymosis and Paraphymosis, - 390

SECTION XIII.

Of Warts on the Glans and Prepuce, and Labia Pudendi, - - 405

SECTION XIV.

Of Gonorrhœa Simplex, - - 416

Appendix, - - - 431

A TREATISE ON GONORRHŒA VIRULENTA, AND LUES VENEREA.

CHAPTER I.

Consideration of the Question, Whether Gonorrhœa and Lues Venerea originate from the same Contagion?

AN opinion has been generally received among practitioners, that Gonorrhœa Virulenta and Lues Venerea are of the same nature; that they originate from the same contagion; and are only distinguished by the circumstance of

Gonorrhœa being a local diſeaſe of the urethra, while the other is a general affection of the ſyſtem. But, as there is cauſe to imagine that theſe diſeaſes ariſe from different ſpecific contagions, and as the eſtabliſhing of one or other of theſe opinions muſt influence the conduct of the cure, it becomes a matter of importance to inſtitute an inquiry into this part of our ſubject.

Both diſeaſes are contracted in a ſimilar way; both, in the firſt inſtance, affect the genital organs; and they occaſionally appear at the ſame time in the ſame patient: hence it has been concluded that they have a common origin, and one method of cure has been ſuppoſed applicable to either.

The refuſal of ſome patients to ſubmit to the diſtreſs and inconveniency, the frequent reſult of a protracted mercurial courſe, and who nevertheleſs recovered from the uſual ſymptoms of Gonorrhœa, firſt ſuggeſted a doubt of the two diſeaſes being produced by the ſame contagion. It is well known

known that Lues Venerea can be certainly cured by mercury only; and the opinion refpecting the exiftence of a fpecific contagion of Gonorrhœa, arifing from this obvious and marked difference in the method of cure, appears to be fixed and eftablifhed by the following facts: The fymptoms and confequences of Gonorrhœa are perfectly different from thofe which take place in Lues Venerea. Both difeafes have appeared, at different periods, in the fame countries; and, in fome inftances, they have remained diftinct and uncombined for a great length of time.

That the fymptoms of the two difeafes are different, is univerfally known. A particular detail of fuch as are peculiar to each, will be given in the enfuing chapters. At prefent, it is only neceffary to obferve, that Gonorrhœa confifts of a difcharge of puriform matter from the urethra; which, even by thofe who fupport the contrary opinion, is now admitted to be, in almoft every inftance, a

local affection, and that it very rarely contaminates the general habit of body: while Lues Venerea is a diſeaſe of the conſtitution, ariſing from the abſorption of venereal virus from any part of the ſurface of the body, but moſt frequently from the genitals; by which are produced buboes, ulcers in various parts, particularly in the noſe and throat, pains and ſwellings in the bones, with a variety of other ſymptoms which it is not at preſent neceſſary to mention.

The firſt appearance of the Lues Venerea is, for the moſt part, in the form of a chancre or ſmall ulcer, in ſome part of the penis. It is univerſally admitted, that even the ſlighteſt affection of this nature is apt to produce pox, or a general affection of the ſyſtem; inſomuch, that no practitioner of experience will truſt the cure of this ſymptom to local remedies. If the ſore be left to itſelf, it almoſt always becomes worſe. The matter which it affords is taken up by the abſorbents; and buboes, with the other ſymptoms

enu-

enumerated above, very certainly enſue. Theſe are almoſt the univerſal conſequences of a ſore produced by the venereal virus; but they alſo occur frequently where the ſkin remains ſound and entire; that is, abſorption of the venereal poiſon often takes place where no veſtige of ulceration is perceptible. This, indeed, is denied by many; but I have met with various inſtances of it, and it will be admitted by every practitioner of experience. Now, this being eſtabliſhed, in the application of the venereal virus to every other part of the body, if the matter of Gonorrhœa were of the ſame nature, why does it not, in almoſt every inſtance, enter the ſyſtem, and produce pox? So far as we know, the urethra is as plentifully ſupplied with abſorbents as other parts of the body; the ſame kind of matter, when applied to them here, ought therefore to be productive of ſimilar effects: and hence Lues Venerea ought frequently, perhaps in every inſtance, to be the conſequence of Gonorrhœa, were the matter

by which the two diſeaſes are produced the ſame.

As this is a ſtrong argument in favour of the two diſeaſes proceeding from different kinds of contagion, much ingenuity has been exerted by thoſe who ſupport the contrary opinion, in endeavouring to account for it.

In the firſt place, it has been ſaid, that Gonorrhœa ſometimes terminates in pox, and, therefore, that this of itſelf is a ſufficient proof of the two affections being of the ſame nature.

Were it certain that this ever happened, no farther evidence would be required, as a few well-marked inſtances would be concluſive; but every unprejudiced practitioner will admit, that no ſufficient proofs of it have ever occurred.

In order to ſupport this opinion, data muſt be received, which we know to be inadmiſſible. We muſt admit, that a perſon with chancres only, communicates to another, not only every ſymptom of pox, but of Gonorrhœa, and that an-
other

other with Gonorrhœa only gives to all with whom he may have connection, chancres with their various consequences. This ought, indeed, to be a very common occurrence; insomuch, that every practitioner should be able to decide upon it with certainty, if this opinion was well founded: Instead of which, it will be admitted by all, that the one disease being produced by the other is even, in appearance, a very rare occurrence. I have paid much attention to the point in question; and, in almost every instance, a few cases indeed only excepted, and where the most particular inquiries even were made, it has happened, that a person infected with Gonorrhœa has received it from another evidently labouring under that disease, and that chancres have been communicated by such as were distressed with chancres only.

This, I am convinced, will be very commonly found to be clearly the case; so that a few instances, bearing some appearances of the contrary, are much more

readily explained on the idea of the two diſeaſes being produced by different kinds of contagion; and this may alſo be ſaid of the few ſolitary caſes that may be met with, of chancre being ſuppoſed to terminate in Gonorrhœa, and Gonorrhœa in chancre, and other ſymptoms of pox. We can more eaſily conceive that the ſame perſon ſhould, in ſome inſtances, receive, and therefore be able to communicate, both kinds of contagion, than that the incident we are conſidering ſhould be ſo ſeldom met with, were the opinion well founded, of the two diſeaſes being originally of the ſame nature.

However ill founded an eſtabliſhed opinion may be, if it has received the ſanction of being generally adopted, we know how difficult it is to overturn it. There are few who enter ſo minutely into the conſideration of ſuch points as to be able to decide upon them; and of thoſe who do, there are very few who will take the trouble of engaging in ſuch diſcuſſions as are neceſſary for the conviction of others.

This

This may be confidered as the chief caufe of the point in queftion remaining fo long in obfcurity, as well as of the explanation hitherto ufually given, of various circumftances in Gonorrhœa and Lues Venerea having been uniformly made to fupport it. It will alfo ferve to account for circumftances being held forth as matter of fact, which, on inquiry, are perceived to be ill founded; for, when once an opinion is admitted, we are apt to give fuch an explanation of whatever may feem to relate to it, as can in any way tend to fupport it.

Thus, although few in the prefent age will affert that Gonorrhœa often terminates in Lues Venerea, yet by many we are told, that it is very apt to do fo when it is improperly treated. Whatever puts a fudden ftop to a fevere or copious difcharge from the urethra is by many fuppofed to do harm. Hence all who condemn the ufe of injections in Gonorrhœa affirm, that they often convert a fimple clap into a pox, by throwing into the blood what otherwife would have been carried

carried off. This, however, is by no means ſupported by experience. A ſtimulating injection will no doubt excite pain and inflammation in the urethra; and this, in ſome inſtances, will be productive of ſwelled teſtes, and perhaps of ſympathetic ſwellings in the glands of the groin; but I have not known a ſingle inſtance of pox induced in this manner: and as I have long been in the daily uſe of injections, many caſes of it muſt have occurred, if the idea I have juſt ſtated were well founded. Till of late, indeed, a patient who was ſo unfortunate as to have a clap ſuddenly ſtopped, was ſo certainly conſidered as poxed, that he was immediately put under a very complete courſe of mercury, by which he was made to undergo a very unneceſſary and diſtreſsful confinement.

Although this practice, however, is now very commonly exploded, yet there are ſome who ſtill adhere to it. I was called, in April 1784, to viſit a gentleman who, in a Gonorrhœa attended with

a

a good deal of inflammation, had been ſo fooliſh as to live freely, and to ride much on horſeback. This, with the unguarded uſe of a very ſtimulating injection, put a ſudden ſtop to the diſcharge; and at the ſame time it excited a very conſiderable degree of pain and inflammation along all the poſterior part of the urethra, towards the proſtate gland and neck of the bladder, attended with a painful and frequent deſire to make water.

On the idea of theſe being ſymptoms of pox, he was immediately put under a courſe of mercury; and, when I firſt ſaw him, he had been uſing it for the ſpace of ſix weeks. The ſurgeon in attendance acknowledged that no advantage had been derived from it; and the patient himſelf ſaid that his diſtreſs was daily increaſing. They were both, therefore, eaſily perſuaded to lay the mercury aſide; and, by the repeated application of leeches to the perineum, of fomentations, and opiates, to allay the pain, the inflammation ſoon began

began to ſubſide; and, in a ſhort time, he was perfectly well.

In December 1788, a young man called upon me, with a painful hard ſwelling in his groin, of an oblong form, nearly an inch in diameter, and reaching from the ring in the external oblique muſcle down to the top of the teſtis. It appeared ſuddenly, about four months before, and ſeemed to be the conſequence of a clap being too haſtily ſtopped. He was at firſt attacked with ſevere pain at the neck of the bladder, which ſtretched to the groin, and down to the teſtis of the ſame ſide. This, together with a conſtant and painful inclination to void urine, rendered his life miſerable. Nor was his diſtreſs in any degree abated by a courſe of mercury which he was immediately put under. On the contrary, the ſwelling, which at firſt was not thicker than a common quill, was now very conſiderable. My idea of the ſwelling was, that at firſt it had been merely an inflammatory affec-

tion

tion of the vas deferens, which by degrees had ſpread to the reſt of the ſpermatic cord; but, what was unuſual, it had never affected either the teſtis or epididemis. As a conſiderable quantity of mercury had been taken, and as, inſtead of proving uſeful, it had rather appeared to do harm, the ſurgeon whom he employed was eaſily perſuaded to truſt the cure to other remedies. Local bloodletting with leeches was frequently repeated, both in the perineum and groin. The parts were regularly fomented with a ſolution of ſaccharum ſaturni. His bowels were kept eaſy with gentle laxatives, and he was put upon a mild diet of milk and vegetables. In a few days the pain abated, and the tumour gradually leſſened, till at laſt, in the courſe of five or ſix weeks, it was entirely gone.

In the courſe of laſt winter, I attended two different patients, with alarming ſymptoms about the neck of the bladder, evidently induced by the improper management of Gonorrhœa. The parts in both

both were not merely pained, but confi-derably fwelled; and, at the fame time, almoft a total fuppreffion of urine took place. Although in both the difcharge from the urethra had been fuddenly ftopped, I did not advife mercury. The patients being both plethoric, were plentifully blooded, firft at the arm, and afterwards repeatedly with leeches in the perineum. This, with fomentations, and opiates to allay the violence of the pain, affifted by a cooling regimen and gentle laxatives, very foon completed the cures.

Thefe inftances are given out of a great number that might be adduced, merely to fhew, that the fymptoms which fupervene on the fudden ftoppage of a clap, are local, and not connected with any affection of the conftitution, which they neceffarily would be, if they were of the fame nature with Lues Venerea.

It will perhaps be faid, that although this may have happened in a few cafes, yet that in others there has been caufe to fufpect, that Lues Venerea has been the

confe-

confequence of a clap difappearing in this manner. In anfwer to this, it is fufficient for me to fhew, that this is at leaft a rare occurrence, as I think I am intitled to do, from my never having met with an inftance of it. It has been fuppofed, that the fudden check given to the difcharge in cafes of clap, muft neceffarily throw the matter into the blood, and that pox muft accordingly enfue from it. Were the matter of the two difeafes the fame, this would happen in every inftance; fo that, when we can fhow that it feldom happens even in appearance, we are entitled, from this argument alone, to conclude, that they are produced by two different kinds of contagion; and, where pox has appeared at the fudden termination of Gonorrhœa, that the two kinds of infection had either been communicated together; or, what may more frequently perhaps be the cafe, the patient will be found to have received the pocky contagion by communication with a difeafed woman at the very time he laboured under Gonorrhœa,

hœa. I have already remarked, that Lues Venerea is frequently produced by abſorption while the ſkin remains entire, and where no chancre or excoriation is perceptible. There is therefore much cauſe to imagine, that in long continued caſes of Gonorrhœa, many may be infected with Lues Venerea by communication with others labouring under it; and as this may happen without any external mark of it taking place, it is not ſurpriſing that ſome fallacy ſhould ariſe from this circumſtance.

The abettors of the opinion, that the matter of the two diſeaſes are the ſame, admit that Gonorrhœa very ſeldom terminates in pox *. And they attempt to account

* This is even granted by one who keenly ſupports the oppoſite doctrine in every other point. In ſpeaking of Gonorrhœa and Chancre not terminating ſo frequently as might be expected in the production of each other, he ſays, " Although it does not often happen, yet it ſome-" times does, *at leaſt there is great reaſon to believe ſo.* I " have ſeen caſes where a Gonorrhœa came on, and in a " few days after in ſome, in others as many weeks, a " chancre

account for this, that is, for the two diseases not being produced more frequently by the application of the same matter, by saying, that this depends upon the difference of parts to which the matter is applied.

They divide the different surfaces of the body chiefly into two kinds, what they term *secreting surfaces* and *non-secret-*

" chancre has appeared; and I have also seen cases where " a chancre has come first, and in the course of its cure a " running and pain in making water have succeeded." V. Treatise on the Venereal Disease, by John Hunter, page 16.

This is what every practitioner has seen; but by admitting so clearly that it is a very rare occurrence, Mr. Hunter tends rather to strengthen the contrary opinion: for, were the two diseases produced by the same kind of matter, the one would clearly and necessarily *often* terminate in the other. In the few cases which Mr. Hunter, in the course of extensive practice, has met with, there is more cause to imagine, either that the two diseases were communicated at once, or that the one was given while the patient laboured under the other, than that nature should deviate so much from her ordinary course as to produce them in a few instances so very differently from what obviously happens in the course of general observation.

ing ſurfaces. By the firſt they mean all the paſſages for extraneous matter, including alſo the ducts of glands, ſuch as the mouth, noſe, eyes, arms, and urethra; and by *non-ſecreting* ſurfaces, the external ſkin in general. To which they add a third kind of ſurface, leading from the one to the other, as the glans penis, prolabium of the mouth, the inſide of the lips, and the female pudendum: which ſurfaces, partaking of the properties of each of the others, but in a leſs degree, are capable of being affected in both ways, ſometimes by being excited to ſecretion, and at other times to ulceration *.

Upon this, their theory, or opinion of the point in queſtion, is attempted to be eſtabliſhed: When the contagion, either of Gonorrhœa or pox, and which they conſider to be the ſame, is applied to any part of the external ſkin, particularly to the glans penis, where the ſkin is very

* Vide John Hunter on the Venereal Diſeaſe.

thin,

thin, chancre or ulceration, they obſerve, will moſt readily enſue, as theſe are *not ſecreting ſurfaces*; while the ſame kind of matter applied to the urethra muſt neceſſarily excite Gonorrhœa, from this being a ſecreting ſurface, and therefore not ſo eaſily affected with ulceration as with irritation; by which an increaſed diſcharge, attended with ſome change in the mucus of the part, muſt accordingly be produced.

This idea, however, is more ingenious than ſolid. It might anſwer the purpoſe of giving a ſpecious appearance to an ill-founded opinion, but it will not ſtand the teſt of inquiry.

In the firſt place, on the ſuppoſition of the matter of Gonorrhœa and Lues Venerea being the ſame, the latter ought to be a much more frequent occurrence than the former, from the greater eaſe with which the matter of infection muſt, in every inſtance, be applied to thoſe parts on which it can produce chancres than to

the urethra, where, inſtead of chancre or ulceration, it almoſt always excites Gonorrhœa. It is difficult to conceive how the matter by which the diſeaſe is communicated ſhould find acceſs to the urethra; while, on the contrary, all the external parts of the penis, particularly the glans, muſt be eaſily and univerſally expoſed to it: and yet Gonorrhœa is a much more frequent diſeaſe than pox. Caſes of Gonorrhœa are in proportion to thoſe of Chancre and Pox, ſo far as my obſervation goes, of about three to one; while it is obvious, that the very reverſe ſhould happen, if the two diſeaſes were produced by the ſame kind of matter *.

Again, were this the caſe, ſhould we not find Gonorrhœa, in almoſt every in-

* Mr. Hunter ſuppoſes, that the proportion the caſes of Gonorrhœa bear to thoſe of Chancre, is as four or five to one. Vide Treatiſe on the Venereal Diſeaſe, p. 217. This is ſurely a weighty argument againſt the opinion he endeavours to ſupport, of Gonorrhœa and Chancre proceeding from the ſame contagion.

ſtance,

ſtance, terminating in Pox, and Chancre in Gonorrhœa; for every one knows, that in Gonorrhœa the matter is at all times paſſing from the urethra over the glans and prepuce, and in Chancre, that it is paſſing from the glans into the entrance of the urethra. It happens indeed, in a few inſtances, (Mr. Hunter, we ſee, has met with ſome caſes of it) that the one diſeaſe ſupervenes upon the other: but we have alſo ſeen that theſe are rare occurrences; and, where they have not been communicated by ſubſequent connection with an infected perſon, that the two diſeaſes have probably been given at one and the ſame time. It is no argument againſt this ſuggeſtion, to ſay, that inſtances have been met with of a Gonorrhœa appearing during the continuance of chancres of ſeveral weeks duration, and *vice verſa*; for every practitioner muſt have met with inſtances of theſe diſeaſes both appearing at the diſtance of two or three months from any expoſure to infection.

I have at this moment a gentleman under cure, for a deep, foul chancre, altogether within the urethra. It was of ſeveral weeks duration before I ſaw it, and yet no Gonorrhœa took place. He is now getting well, by a complete courſe of mercury, and repeated application of cauſtic.

I have met with various caſes of this, as every practitioner muſt have done; and, ſo lately as the month of April laſt, I was called to a gentleman with a painful chancre on each ſide of the urethra. The ſore extended about the eighth part of an inch up the paſſage; and the parts being much inflamed, I heſitated to apply cauſtic. This rendered the cure tedious, but ſtill no Gonorrhœa took place. At laſt, after having taken a conſiderable quantity of mercury, and when the chancres were looking clean, and in a healing ſtate, he was ſeized with all the ſymptoms of a ſevere clap, with heat in making water, chordee, and a plentiful diſcharge of a thin green matter. This, however, bore

all

all the appearance of a recent infection. I at once ſaid ſo to my patient; and he candidly acknowledged that he had imprudently expoſed himſelf, by having connection with a girl of the town, three or four days previous to the acceſſion of theſe ſymptoms.

We may alſo remark, that the diſcharge from Gonorrhœa frequently becomes ſo acrid as to excoriate the glans and preputium, and even to excite a very plentiful formation of matter; but every one knows that this is materially different from chancre. It is altogether different in appearance, and ſo materially different in its effects, that ſcarcely any practitioner of experience will truſt the cure of chancre to a y thing but mercury, while, in the other, mercury, I imagine, is very ſeldom employed. However extenſive the excoriations may be, they are eaſily removed by local remedies; and I have never known an inſtance of pox ſucceeding to this kind of treatment. Nay, I have met with various inſtances of ſuch

affections, where mercury had been given in confiderable quantities with no advantage whatever, and where a cure was effected by the ufe of an aftringent wafh.

About eighteen months ago, a gentleman came to town from a confiderable diftance, with an extenfive excoriation over all the glans and preputium, attended with a difcharge of a large quantity of thin, offenfive matter. The quantity of matter indeed was fo confiderable, that at firft fight it appeared to be the difcharge from a very inveterate recent cafe of Gonorrhœa; but, on farther examination, it was found to proceed entirely from the glans and prepuce, the clap by which it was produced being entirely gone.

He had taken mercury for the fpace of fix weeks; and the parts had been regularly bathed in milk and water, but with no advantage. The difcharge continued as plentiful as ever, and the preputium was beginning to acquire fome degree of thicknefs, and to be difficult to retract.

In

In the ſpace of a week he was completely cured, merely by bathing the parts from time to time with brandy and water, and applying, during the night, a poultice ſtrongly impregnated with ſaccharum ſaturni.

This, as well as a variety of ſimilar affections, which, were it neceſſary, I might enumerate, clearly evince, not only that the matter of Gonorrhœa, when confined to the urethra, does not terminate in pox, but that it proves equally inoffenſive to the conſtitution, where it is even ſo ſharp and acrid as to excoriate the ſurrounding parts. This points out a very marked difference between the matter of the two diſeaſes. In pox, even the ſlighteſt ſore never fails to throw matter into the ſyſtem, while the moſt extenſive affections proceeding from Gonorrhœa are ſo ſeldom found to injure the conſtitution, that I have never met with an inſtance of it.

By thoſe who wiſh to ſupport the oppoſite doctrine, it is ſaid, that the matter of

of Gonorrhœa would more frequently terminate in pox, were it not for the mucus of the urethra with which it is blended, and by which they ſuppoſe it to be rendered not only milder in its nature, but not ſo apt to be taken up by the abſorbents. This, however, is merely ideal; and no proof can be advanced in ſupport of it. Beſides, the force of the argument is entirely done away, when we ſee, from what has been obſerved above, that even where the matter of Gonorrhœa is more acrimonious than almoſt ever occurs in caſes of Chancre, ſo as in ſome inſtances to produce very extenſive excoriations, that ſtill no affection of the conſtitution enſues from it.

Nay, we ſee, even in ſuch diſeaſes as are found to proceed from what is termed a tranſlation of the matter of Gonorrhœa to other parts of the body, and which we ſuppoſe to happen through the medium of the circulation, that ſtill no affection of the conſtitution proceeds from them. This is particularly the caſe in ſuch inſtances

of

of ophthalmia as ſometimes proceed from Gonorrhœa, and in which a conſiderable diſcharge takes place, of a puriform matter from the eye-lids, very ſimilar to the matter of a recent clap. I have alſo met with inſtances, of patients labouring under Gonorrhœa being ſeized with a ſimilar diſcharge from the membrane of the noſe; but in none of theſe have I ever known Lues Venerea enſue. A conſiderable number of examples might be adduced of each of theſe; but the three following will be ſufficient.

In the year 1786, a young man applied to me, with a very troubleſome painful diſeaſe in both eyes. The eye-balls were not much inflamed outwardly; but as he experienced an intenſe degree of pain from the admiſſion of light, I concluded that the retina, or other deep-ſeated parts of the eye, were in a ſtate of inflammation; and the membrane of the eye-lids was not only inflamed, but a conſtant and copious diſcharge took place from them, of a greeniſh yellow matter, bearing much the appearance of the matter of a recent clap.

The

The account I received of his diſeaſe was this: That he had for eight or ten days laboured under Gonorrhœa, the ſymptoms of which, however, were not more ſevere than uſual; when, after being heated with drinking port wine, the diſcharge from the urethra, which had previouſly been copious, diſappeared almoſt entirely. His eyes, almoſt immediately thereafter, became painful; and, in leſs than twenty-four hours, the diſcharge of matter had taken place from the eye-lids.

The diſeaſe was at firſt treated with bliſters, ſlight evacuations of blood, and the uſual applications of ointments and collyria. Theſe not proving ſucceſsful, a courſe of mercury was preſcribed: but, although different attempts were made with it, miſchief always enſued from it. It did not leſſen the diſcharge, while it obviouſly increaſed the inflammation, and rendered the eyes more irritable. I therefore adviſed this remedy to be laid aſide. A quantity of blood was taken from the temporal

temporal artery of one ſide; ſuch veſſels as were turged upon the eye-balls were divided; ſcarifications were made in the inflamed parts of the eye-lids; poultices were applied over the eyes, in which opium and ſaccharum ſaturni were diſſolved; and gentle laxatives were preſcribed. By theſe means the pain ſoon abated; the inflammation and diſcharge of matter leſſened; and, in the courſe of a fortnight, no ſymptom of the diſeaſe remained, but a degree of irritability on expoſure to much light, with which both eyes continued to be diſtreſſed for five or ſix months thereafter.

In the courſe of the following year, on being attacked with Gonorrhœa, but of a more violent nature than the former, he was again ſeized, after expoſure to much cold, and riding on horſeback, to a ſimilar affection of his eyes. In this inſtance, too, bloodletting, and the other remedies formerly preſcribed, proved ſucceſsful; and he has not ſince that period had any return of the diſeaſe.

About

About two years ago, I was deſired to viſit a patient, who, during confinement from a ſwelled teſtis induced by a Gonorrhœa, was ſuddenly ſeized with a profuſe diſcharge of matter from one of his noſtrils, verv ſimilar to the running of a clap. The membrane of the noſtril appeared tender, and ſomewhat inflamed; but little or no pain occurred from it. The diſcharge from the urethra had diminiſhed conſiderably previous to the teſtis becoming inflamed, and, on this taking place from the noſe, it diſappeared entirely. This ſuggeſted the propriety of attempting to excite a return of the diſcharge by the urethra; but no advantage being derived from this, I adviſed the affection of the noſe to be treated with injections ſimilar to what we uſe in caſes of clap. An aſtringent ſolution was thrown up, ſometimes with a ſyringe, and at other times by inſerting a bit of ſponge immerſed in it up the noſtril; and in the courſe of a few days the running ceaſed entirely.

Since

Since that period, the ſame patient has been twice affected in a ſimilar manner, and the ſame kind of treatment proved equally ſuccefsful. No mercury was given, and no ſymptom of pox has ever appeared.

In the courſe of a few weeks after the recovery of this patient from the firſt attack of the diſeaſe, I was deſired to ſee a friend of his, who for ſeveral years had been diſtreſſed with a ſimilar diſcharge from both his noſtrils. The running had occurred during the continuance of a clap; and although it had frequently diminiſhed in quantity, yet at all times it was ſo conſiderable as to be productive of much uneaſineſs. No ulceration appeared on the membrane of the noſtrils, but it was of a deep red colour, and tender over its whole extent. A variety of remedies had been employed; and at laſt, after the diſeaſe had gone on for upwards of three years, although no other ſymptom appeared, he was adviſed to undergo a courſe of mercury.

This

This was done in the moſt attentive manner; but no advantage enſued from it.

In this ſituation, I expected that the ſame plan of treatment which proved ſucceſsful in the preceding caſe, and which had alſo done ſo in others, would likewiſe anſwer here. In this, however, I was diſappointed; for, although every variety of injection was uſed that I ever employed, yet no material advantage enſued from them. The running was ſometimes indeed leſſened by them, but it always returned equally ſevere as before; and although it has of late, even when no remedies were employed, become conſiderably leſs, it ſtill continues in ſuch quantities as to prove highly diſtreſsful. No other ſymptom of the diſeaſe, however, has ever occurred.

As a farther proof of the difference of the contagions of Syphilis and Gonorrhœa, it may be remarked, that no ſtage of pox has ever been known to induce Gonorrhœa, which ſurely would occaſionally

ally happen, if the two diſeaſes were of the ſame nature. We may alſo remark, that, in numberleſs inſtances, people have been poxed by the matter of Syphilis being by accident applied to a cut or a ſcratch, as often happens with ſurgeons in the dreſſing of chancres and buboes; but no one ever heard of a pox being got in this manner from the matter of Gonorrhœa. It has indeed been ſaid, that chancres may be produced by inſinuating the matter of Gonorrhœa beneath the ſkin. But experiments upon this ſubject are productive of ſuch anxiety and diſtreſs, that they never have been, nor ever probably will be, repeated ſo frequently as the nature of it would require. Nothing, therefore, can be admitted from this argument; for, in order to avoid fallacy, and to give ſupport to the opinion, theſe experiments would not only require to be conducted with accuracy, but to be numerous, and to be repeated on a variety of patients under every poſſible variety of circumſtances; whereas we have

heard of only a ſingle experiment or two being made by any individual; and even theſe ſeem to have been made under the management of ſuch as were ſtrongly and obviouſly biaſſed in favour of one ſide of the queſtion.

In oppoſition to theſe, too, I may mention, that, induced by ſome late publications upon this ſubject, two young gentlemen of this place have made ſome experiments upon themſelves, with a view to aſcertain the point in diſpute; but the reſult was materially different from what appears to have happened in the experiments to which I allude. By the introduction of the matter of chancres, as well as of buboes, into the urethra, ſome pain and irritation were excited, but no Gonorrhœa enſued; and, by fretting the ſkin of the prepuce and glans with a lancet, and rubbing the parts with the matter of Gonorrhœa, ſlight ſores were produced; but they never aſſumed the appearance of chancres, and they healed eaſily without the uſe of mercury.—For the

the reaſons mentioned above, however, we cannot place much dependence upon theſe or any other experiments that have yet been made upon this ſubject; we muſt truſt therefore to experience and obſervation in the ordinary courſe of practice for means to aſcertain it.

The other fact on which the doctrine we attempt to eſtabliſh reſts, is, that Gonorrhœa and Syphilis have appeared at different times in the ſame countries, and in ſome inſtances have remained diſtinct and uncombined for a great length of time.

If theſe two diſeaſes were of the ſame nature, and proceeded from the ſame contagion, they ought to have appeared nearly at the ſame time in every country to which the infection was carried. This does not appear, however, from the hiſtory of the diſeaſe, to have been the caſe. From the earlier writers upon this ſubject, it is evident, that the Lues Venerea was known in Europe at leaſt forty years before the Gonorrhœa Virulenta. Doctor Aſtruc, whoſe accuracy and minute at-

tention to this ſubject has not been equalled by any one, aſſerts, that in his time Gonorrhœa had not been long known in China, although we know that the Lues Venerea had long prevailed in that country: and it would appear, notwithſtanding of any thing that has been ſaid to the contrary, that the Lues Venerea was imported to the iſland of Otaheite a conſiderable time before Gonorrhœa. It ſeems to have been carried to that and other iſlands in the ſouth ſeas by the very firſt European navigators who touched there, and to have remained diſtinct, without being connected with Gonorrhœa, for a very conſiderable time; for, when Captain Cook viſited theſe iſlands in his ſecond voyage, we have authority for ſaying, that Gonorrhœa had not then appeared in them.

Theſe hiſtorical facts all tend to prove, that where only one of theſe diſeaſes has been imported to any particular diſtrict, it has always remained diſtinct, without producing the other; and which

we cannot ſuppoſe would have happened, if both were formed by the ſame contagion. And, in addition to theſe, I may add another, not leſs remarkable, the truth of which may be aſcertained by all who incline to inquire concerning it, as the ſcene of it lies in our own country.

In various parts of the country of Scotland, particularly in ſome parts of the Highlands; in Galloway, and in Dumfries-ſhire; the common people have, for a great length of time, been afflicted with the Lues Venerea, under the denomination, as they term it, of Sibbens; and which, from thoſe diſtreſſed with it having no communication with thoſe infected with Gonorrhœa, has ſtill retained its original, unmixed form, without a ſingle inſtance, ſo far as I know, of Gonorrhœa having been ever produced by it *. There

* This muſt have happened from the diſeaſe in theſe diſtricts prevailing almoſt entirely among poor country people, whoſe manners do not expoſe them to the hazard of being infected with Gonorrhœa. None, however, can

There is evidence, in ſome of theſe diſtricts, of this diſeaſe having prevailed among them for upwards of ſeventy years: Nay, in ſome of them, it is ſaid, from tradition, to have been left there by the ſoldiers of Oliver Cromwell, and to have been given, ſince that period, by one generation to another; and, although I have had opportunities of ſeeing many hundred people labouring under it, with ulcers in the throat, nodes of the bones, fungous excreſcences about the anus, blotches over the body, with almoſt every other ſymptom of Syphilis, yet not an inſtance has occurred to me, as I have obſerved above, nor have I heard of any, where Gonorrhœa took place in it. Whether it is from thoſe infected with it concealing it longer than uſually happens in towns, or what may be the cauſe of it, I ſhall not

can eſcape the Sibbens who are much in company with thoſe labouring under it; and ſo much are they convinced of its being the ſame diſeaſe with Lues Venerea, that even thoſe who get it in the moſt innocent manner, are ſo much aſhamed of it, that they never ſpeak of it as long as it can poſſibly be kept ſecret.

at

at present pretend to determine; but certain it is that the symptoms produced by it are more inveterate than we usually find them to be in the ordinary form of this disease. They appear to be more particularly infectious; the slightest communication with those labouring under the disease being apt to produce it. The symptoms spread more rapidly, and a greater quantity of mercury is, for the most part, required to remove them; but still Gonorrhœa is never produced in any stage of the disease.

A disease very similar to this broke out among the country people of Canada, some years ago, owing, as is imagined, to communication with some of the soldiers quartered among them, who were infected with Lues Venerea. It is attended, as is the case with the Sibbens in Scotland, with all the symptoms of Syphilis in the most virulent form of that disease; and it is so very infectious as to be communicated by eating or drinking out of the same vessel, or drying with the same

cloth that has been uſed by thoſe labouring under it. It often enters the conſtitution by abſorption from the ſurface, without any previous ulceration: In which caſe it afterwards breaks out in buboes, nodes, ulcers, and other ſymptoms of a confirmed Lues; but not an inſtance, I am informed, has happened, of Gonorrhœa being produced by it.

This, as well as what has occurred in the progreſs of Sibbens, is preciſely what happened with the Lues Venerea, when it firſt appeared in Europe, as well as at a late period in the South Seas; and there cannot be a doubt of the ſame circumſtances taking place wherever the Syphilis only is communicated. We have ſeen, in all theſe inſtances, that Gonorrhœa has never been produced by it, which ſurely could not have happened if the two diſeaſes were of the ſame nature, and produced by the ſame contagion. They could never, in that caſe, have remained for any length of time ſo diſtinct and preciſely marked; for the one muſt neceſ-

ſarily

farily, in almoft every inftance, have foon been productive of the other.

As a farther fupport of this opinion, I may add, that if the two difeafes were of the fame nature, and produced by the fame infection, the remedies proving ufeful in the one might be expected to prove likewife fo in the other. Inftead of this, we find that thofe upon which we depend with moft certainty in Gonorrhœa, have no effect whatever in the cure of Syphilis, while mercury, which is the only remedy, as we have obferved above, upon which any dependence can be placed for the cure of Syphilis, does not, in Gonorrhœa, produce any advantage. Nay, that in fome cafes, it evidently does harm.

We alfo know, that Gonorrhœa will often terminate whether any remedy be employed or not, merely by moderate living, and keeping the parts regularly clean. The difeafe by this alone will, in moft inftances, become gradually milder, till at laft it will difappear entirely. No fuch thing, however, happens in Lues

Venerea

Venera. In this, as we have already remarked, even the mildeſt ſymptom becomes daily worſe, unleſs mercury be employed; nor will any practitioner of experience truſt the cure even of the ſlighteſt chancre to any other remedy.

Upon this evidence alone, of the method of cure of the two diſeaſes being ſo eſſentially different, we might, I think, conclude that they are different in their nature, and that they proceed from different contagions. Were they of the ſame nature, and proceeding from the ſame cauſe, it is not poſſible to conceive that any medicine would act as a certain cure for the one and do harm in the other, and yet every practitioner will admit that mercury is the only remedy hitherto known, upon which we can depend for the cure of Lues Venerea, while it evidently often does harm, as I have already obſerved, in Gonorrhœa.

If the ſubject now under diſcuſſion was merely of a ſpeculative nature I ſhould not have entered ſo minutely into it,

for

for in that caſe it would have been a matter of indifference both to practitioners and patients whether theſe diſeaſes were of the ſame nature or not; but, as the treatment of Gonorrhœa ought to depend much upon this circumſtance, I judged it proper, before proceeding to treat of it, to make this attempt to have the point in queſtion aſcertained.

CHAP.

CHAP. II.

Of the Gonnorrhœa Virulenta.

SECTION I.

General Obſervations on the Symptoms, Cauſes, and Seat of Gonorrhœa Virulenta.

EVERY diſcharge of matter from the urethra, excited by impure coition, is termed Gonorrhœa Virulenta. As the term implies a diſcharge of ſemen, and as this diſeaſe is not neceſſarily attended with any ſeminal evacuation, it is here obviouſly miſapplied; but we think it better to retain even a faulty denomination

tion when very univerſally received, than to incur the hazard ariſing from the confuſion which might enſue from the propoſal of amendments.

The period at which the diſcharge takes place, after expoſure to infection, is always uncertain. I have known it happen in a few hours; often in the courſe of a day or two, and in ſome inſtances not till ſeveral weeks have elapſed. From the third or fourth day, to the ſeventh and eight, is the moſt frequent period.

This does not appear, however, to have any effect on the nature or violence of the ſymptoms. Some indeed have imagined, that the diſeaſe muſt be mild or ſevere according as it appears early or late after the matter of infection has been applied; but this does not accord with my obſervation. I have often known the ſymptoms mild when they appeared early after expoſure to infection, and ſevere when much time had elapſed. In one of the moſt obſtinate caſes of Gonorrhœa I have ſeen, the running did not appear till nearly the ninth

week

week from the time of infection. A gentleman ſailed from Jamaica two days after having connection with a woman of ſuſpicious character. No ſymptoms appearing till ſeveral weeks had elapſed, he concluded that he had eſcaped; when, two days before coming into port, being the fifty-eight of his voyage, a very copious running appeared.

In ſome few caſes, the diſcharge takes place without the patient having any warning of its approach; but, for the moſt part, it is preceded by ſymptoms indicating ſome degree of inflammation in the urethra: A ſenſe of fulneſs and tightneſs is felt over all the under part of the penis; the patient has a more frequent deſire than uſual to void urine, accompanied with a peculiar kind of itching heat along the urethra, at the ſame time that the extremity of that canal is obſerved to be of a more deep red colour than ordinary, and more than uſually tender to the touch. In ſome caſes, too, the urethra ſeems to be contracted, or leſſened in its diameter;

diameter; the urine coming off in a ſtream much ſmaller than natural, while at other times it is forked, as if the paſſage was divided in two.

On the running appearing it is ſometimes white, and nearly of the conſiſtence of purulent matter; but, for the moſt part, it is thin, and of a yellow green colour. In ſome caſes it is brown, reſembling the diſcharge of old ſcorbutic ſores, and in others it conſiſts almoſt entirely of blood, owing to the eroſion or rupture of one or more blood-veſſels in the urethra. In a great proportion of caſes, the diſcharge of matter from the urethra, and ſcalding heat in making water, are the only ſymptoms which take place; but in others, theſe are accompanied with chordee, or painful involuntary erections; with much uneaſineſs in the teſtes, which frequently become ſo tender and irritable that the ſlighteſt touch excites pain. Severe degrees of pain often ſtretch from the penis to the groins and thighs; and in ſome caſes over all the abdominal viſcera,

cera, particularly over the under part of the belly.

In ſome caſes the chordee, and in others theſe ſympathetic pains ſtretching to the groins, and contiguous parts, are the moſt diſtreſsful ſymptoms of the diſeaſe. I have known the latter ſo ſevere as to render the patient altogether unable to take any kind of exerciſe; while the chordee, which is uſually worſt in bed, is apt to deprive him entirely of ſleep.

Beſides theſe pains in the parts contiguous to the penis, and which we ſuppoſe to be chiefly the effect of nervous irritability, the glands in the groin in ſome inſtances ſwell, and become hard; but unleſs the running be accompanied with chancres, theſe ſwellings very commonly ſubſide, and do not proceed to ſuppurate; an important fact, which may be conſidered as an additional proof to what was mentioned in the laſt chapter, of the difference between Gonorrhœa and Lues Venerea.

In

In the courſe of the diſeaſe the glans penis ſometimes becomes red and inflamed, and a yellow, fœtid matter, oozes from its whole ſurface. In ſome caſes this is accompanied with evident ulceration: in others the ſkin remains entire, and the matter is obſerved, upon preſſure, to proceed from an infinite number of ſmall points. In both they are ſuppoſed to proceed from the matter paſſing out of the urethra, and allowed, by the negligence of the patient, to reſt too long upon the tender cuticle of the glans.

In ſome caſes, however, this inflammatory affection of the glans, and diſcharge with which it is accompanied, takes place of itſelf, and without any diſcharge from the urethra. In which caſe, from the reſemblance which the matter bears to that of Gonorrhœa, it has uſually been termed Gonorrhœa Spuria. This inflammation, in ſome caſes ſpreads to the prepuce, in which it very commonly produces ſome degree of contraction. When the prepuce becomes ſo much ſtrait-

ſtraitened that it cannot be drawn back, a diſeaſe is formed, which we term phymoſis; and, when it contracts behind the glans, a diſeaſe termed paraphymoſis takes place.

Although in Gonorrhœa ſome degree of uneaſineſs is uſually felt along the whole courſe of the urethra, yet we know, that in moſt inſtances, the ſeat of the diſeaſe lies within an inch, or little more, of the point of the penis. In a few caſes, however, whether from maltreatment of the diſorder; from the nature of the infection being more than uſually virulent, or from peculiarity of conſtitution of the patient, the diſeaſe ſpreads backward till it extends over the whole length of the urethra, even to the bladder itſelf. The proſtate gland and internal coat of the bladder become affected, and ſympathetic pains ſtretch from theſe parts along the ureters to the kidneys.

When the bladder becomes in this manner diſeaſed, the ſtate of the patient is, for the moſt, extremely miſerable: he

feels

feels almoſt a conſtant deſire to make water, accompanied with ſevere preſſure or bearing down upon the affected parts, proceeding from involuntary ſpaſmodic contractions of the abdominal muſcles. The whole region of the loins, particularly about the kidneys, becomes ſo painful and irritable, that much diſtreſs is excited by whatever tends to bring the muſcles of theſe parts into action, and the patient often complains of a conſtant teneſmus, and of a frequent ſhooting pain about the anus and neck of the bladder.

In this ſtage of the diſorder there is ſeldom any conſiderable diſcharge from the urethra; but, for the moſt part, a large quantity of very viſcid-fœtid-mucus is diſcovered in the urine, which, in the courſe of a few hours, ſubſides, and adheres ſo firmly to the ſides of the veſſel as not to be eaſily ſeparated.

When a Gonorrhœa has either been improperly treated, or when much inflammation takes place from any other cauſe, the teſtes are apt to ſwell and inflame,

and abſceſſes often form in Cowper's glands, as well as in other parts of the urethra. When theſe burſt outwardly, or when the urine by any means finds acceſs to them, they are often productive of great diſtreſs to the patient and perplexity to the practitioner, as they frequently baffle every attempt that is made for removing them.

It will readily be conceived that all the ſymptoms we have deſcribed are ſeldom or never met with in the ſame patient, and that theſe which do take place will be in very different degrees in different caſes. This is particularly remarkable with reſpect to the quantity of diſcharge, which, in ſome inſtances, is ſo trifling as ſcarcely to excite any inconvenience, whilſt, in others, it is ſo profuſe as to prove highly diſtreſsful. In ſome caſes too, the heat of urine is ſo inconſiderable as not to deſerve notice; and in ſuch inſtances alſo, the deſire to paſs water is ſeldom very frequent, while, in others, theſe ſymptoms

are

are both ſo unſupportable as to render the patient miſerable.

In moſt inſtances of Gonorrhœa any external inflammation which occurs is confined to the extremity of the urethra; but, in ſome caſes, it runs ſo high as to ſpread over the whole glans, where it might be expected to terminate, as inflammatory affections in other parts of the body moſt frequently do, in the formation of abſceſſes. This, however, very rarely happens. We have obſerved, above, that, in a few inſtances, a purulent-like matter oozes from the whole ſurface of the inflamed glans; but I have ſcarcely known an inſtance of any extenſive abſceſs in the ſubſtance of the glans. The inflammation, for the moſt part, terminates by diſperſion. In a few caſes it ends in mortification.

In women the ſymptoms of Gonorrhœa are, for the moſt part, much milder than in men. It ſometimes happens that a flow of matter is all that occurs; and, as the diſcharge is very ſimilar to the mat-

ter of fluor albus, the two diſeaſes are often miſtaken for one another.

This abſence of pain, however, takes place only where the vagina is the ſeat of the diſeaſe. When the urethra becomes affected the ſymptoms are nearly the ſame as in the other ſex. A diſtreſsful degree of irritation occurs at the extremity of the urethra, accompanied with heat of urine, and a very frequent deſire to paſs water. In ſome caſes the inflammation ſpreads to the bladder, and even to the kidneys, uterus, and ovaria; or at leaſt theſe parts come to be ſo much affected with pain as to give cauſe to ſuſpect that they are in a ſtate of inflammation. Pain, even in a ſevere degree, will no doubt occur from nervous ſympathy, and this I believe to be frequently the caſe here; but I have met with different inſtances of a conſiderable degree of inflammation being excited by Gonorrhœa in all the parts which I have mentioned: that is, they have become ſwelled, hard, and exceſſively painful, inſomuch that the ſlighteſt touch would

create

create a great degree of uneaſineſs; and blood-letting, with other evacuations, were the only remedies from which relief was obtained. In ſome caſes the matter is ſo ſharp and acrid as to excorriate the clitoris, nymphæ, and labia pudendi. This excites a great deal of uneaſineſs; more than ever takes place in men from a mere affection of the external parts; for, as theſe parts are in women preſſed upon in ſitting, the ſlighteſt degree of inflammation is, from this cauſe alone, productive of much diſtreſs. They are often obliged to remain conſtantly in bed; being unable either to walk, ſtand, or ſit.

It is impoſſible, in any caſe of Gonorrhœa, to determine at firſt, in what manner it will terminate, for we often find the moſt ſevere, as well as the moſt obſtinate diſcharge, ſucceed to ſymptoms of the mildeſt nature, while in ſome caſes it ends quickly and eaſily, where the ſymptoms at firſt were very ſevere. It is in general believed that the diſeaſe will be mild, and of ſhort duration, where the

running is white or yellow; and, on the contrary, that it will neceſſarily prove ſevere and tedious, where it is at firſt green, or much tinged with blood. This, however, is by no means univerſally the caſe; for inſtances occur daily, of the running proving tedious, where it was at firſt of the colour and conſiſtence of purulent matter, while others often happen of its ending quickly, where the matter was at firſt either deeply tinged with blood, or of as deep a green as this diſcharge has ever been obſerved.

In the progreſs of this diſeaſe, we always reckon it a favourable circumſtance to obſerve the matter become thick and ropy. This cannot indeed be mentioned as an infallible proof of the diſcharge being ſoon to terminate; but it is, undoubtedly, one of the moſt favourable occurrences in every caſe of clap. When the running does not ſoon become ropy, it is apt to terminate in gleet, the moſt perplexing ſymptom in this diſorder, and of

of which we ſhall ſpeak more particularly in an enſuing chapter.

We ſhall hereafter have occaſion to obſerve that a diſcharge may be produced from the urethra by different cauſes, very ſimilar to the matter of Gonorrhœa virulenta. At preſent it is only neceſſary to remark, that, in this diſeaſe, the diſcharge is obviouſly the effect of irritation excited in the membrane of the urethra and contiguous parts, by matter from an infected perſon being applied to them.

Some difference of opinion has ariſen of the manner in which the matter of infection is communicated to the urethra. By ſome it is ſuppoſed to happen in conſequence of being firſt abſorbed from the ſurface of the glans, and afterwards depoſited on the membrane of the urethra; as they do not think that it can paſs directly into the urethra, during coition. No good reaſon, however, can be given for this opinion: it appears more probable that the matter at firſt finds acceſs between the lips of the urethra; that it afterwards

ſpreads

ſpreads, in a gradual manner, along the paſſage, by mixing with the mucus, with which it meets, and that the progreſs which it makes will, in a great meaſure, depend upon the parts to which it is applied being more or leſs ſuſceptible of inflammation; upon the general ſtate of health of the patient; upon his manner of living; and perhaps upon other cauſes.

I do not conceive, however, that the kind of matter by which the diſcharge is produced has ſo much influence on the violence or duration of the ſymptoms as has been imagined. It is indeed the opinion of ſome that a ſevere and obſtinate caſe of clap may always be traced to an infection of ſome peculiar degree of virulency; but this will not be found to happen with any kind of uniformity. So far as my obſervation goes, it is in Gonorrhœa nearly the ſame as in ſmall pox. The mildneſs or violence of ſymptoms does not depend upon the matter by which the diſeaſe is produced ſo much as upon other circumſtances. Hence the

ſame

woman will, under the ſame infection, communicate the moſt virulent ſymptoms to one perſon, and the mildeſt to another.

That much depends upon the habit of body of the patient, and upon his manner of living, will ſcarcely be doubted; but the following fact renders it obvious. Three gentlemen, who aſſociated much together, and who were accuſtomed to live freely, returning one night from a drinking club, reſolved to viſit a girl of the town, and to take a friend along with them who had that night been a viſitor in their ſociety, but who uſually lived with much ſobriety. They all had connection with the ſame girl. The three aſſociates had all the moſt ſevere claps I ever met with; while the other, who alſo received the infection, had the diſeaſe in the mildeſt form. This would not, in ſimilar circumſtances, always happen, as we ſometimes find people who live with much circumſpection, liable to very ſevere attacks of Gonorrhœa; but, for the moſt

moſt part, the degree of violence of this diſeaſe has a conſiderable dependence on the manner of living of the patient.

The matter diſcharged in Gonorrhœa being very ſimilar to what is daily obſerved to flow from ſores in other parts, and the quantity being often very conſiderable, it was the prevailing opinion, till of late, that it proceeded from ſores or ulcers in the urethra. We now know, however, that ulcers very ſeldom take place here; and, when they do, that they may be traced to ſome accidental cauſe, ſuch as the rupture of a blood-veſſel, in no degree neceſſarily connected with the exiſtence of the diſeaſe. On diſſection, after death, it is found, almoſt in every inſtance, that the membrane of the urethra is entire, and that the matter is produced by inflammation alone.

It had long been known, that inſtances were occaſionally met with on diſſection, where no degree of ulceration in the urethra was diſcovered. This, however, was conſidered as a ſingular occurrence, and that

that it never happened but where the ſymptoms were uncommonly mild; for at that time it was ſuppoſed, that ulceration, or a deſtruction of parts, was requiſite for the production of matter. But we now know, that this is by no means the caſe, and that an inflamed ſurface, even where no abraſion is perceived, will produce all the varieties of matter which ſores ever afford, and that different kinds of animal fluids may be converted into theſe, merely by being kept in certain degrees of heat.

By this the difficulty is removed, which otherwiſe we muſt have experienced in accounting for the large quantities of matter daily diſcharged from the urethra in Gonorrhœa; which, in ſome caſes is ſo conſiderable, that nothing leſs than an affection of the whole extent of that canal could afford it. Now thoſe who imagine that the matter proceeds from ulcers, have never gone ſo far as to ſay that this ever takes place: nor could it probably occur, but with ſuch conſequences as very ſeldom

dom enſue from Gonorrhœa. What I allude to forms an unanſwerable objection to the idea of ulcers being frequent in this diſeaſe, even although no opportunities had occurred of proving it by diſſection. Where the membrane of the urethra is in any point ruptured, either by the burſting of an abſceſs into it, or by any other cauſe, the moſt diſtreſsful conſequences almoſt univerſally enſue; for the urine paſſing into the contiguous parts, forms ſwellings, which uſually terminate in fiſtulous openings, that prove always tedious, and of uncertain event. Every practitioner knows, that even the ſlighteſt opening into the urethra is apt to terminate in this manner; ſo that, if the matter of Gonorrhœa proceeded from ulceration, the conſequences of almoſt every caſe of Gonorrhœa, would neceſſarily prove much more formidable than we ever, in any inſtance, find them to be.

In caſes of long continued Gonorrhœa, the membrane of the urethra is apt to be ſo relaxed, that fungous excreſcences form

in

in different parts of it. Thefe not only impede the paffage of the urine, but, becoming foft and tender, they at laft ulcerate, and throw out very confiderable quantities of matter. This, however, is never to be confidered as the caufe of Gonorrhœa, but merely as the effect of it. It often proceeds from mifmanagement, either on the part of the patient or practitioner; and fometimes from fome conftitutional affection to which the patient at the time may be liable.

Inftead of ulceration, we find, that in a great proportion of cafes, there is merely a flight degree of inflammation, extending from the extremity of the glans to an inch or perhaps an inch and a half up the urethra. In more obftinate cafes of clap, Cowper's glands, with their ducts, which terminate in the urethra, are found affected. In a third ftage of the difeafe, the proftate gland, and contiguous parts of the urethra, are inflamed; and in the fourth, and what may be reckoned the moft diftrefsful ftage of clap, the internal coat of the

the bladder is found inflamed. For the moſt part, the inflammation is confined to the neck of the bladder; but I have met with inſtances of its being perceptible over the whole of it, and of its even extending along the ureters to the kidneys.

This inflammation, however, is chiefly obvious at firſt. On a long continuance of the diſeaſe, the parts affected, inſtead of being either inflamed, or in a ſtate of ulceration, are of a more pale colour than natural; the membrane of the urethra is found ſoft and relaxed; and coloured mucus or matter may be preſſed out from an infinite number of ſmall points over every part of it that has been diſeaſed.

This is preciſely what happens with every membrane that has remained long under a ſlight degree of inflammation, particularly with the membrane of the noſe and trachea. Theſe parts often afford very conſiderable quantities of matter, or of mucus very much reſembling matter, for a great length of time; and yet, upon diſſection, they are ſeldom or never found

in

in a ſtate of ulceration, the membrane being for the moſt part only ſlightly inflamed. We may here indeed remark, that the reſemblance between the two diſeaſes, Gonorrhœa and Catarrh, is, in certain ſtages of each of them, very remarkable. They ſeem both to originate from inflammation excited upon a membrane. The matter of the one is in many inſtances very ſimilar to that of the other. They ſeem both to be local affections only; and the parts on which they are ſeated are, after death, found to be affected in a ſimilar manner.

But although, in the latter ſtages of Gonorrhœa, in which chiefly opportunities occur of examining the ſtate of the parts after death, the inflammation is found to be for the moſt part inconſiderable, yet, in the commencement of the diſeaſe, the parts are often highly inflamed, particularly when thoſe about the neck of the bladder are affected. This is obvious from the ſymptoms; particularly from the violent pain which always takes

place, and from the antiphlogiftic remedies employed for the cure of the difeafe.

SECTION II.

Of the Prognosis in Gonorrhœa Virulenta.

IN every difeafe, it is of importance for a practitioner to be able to fay at what time and in what manner it will terminate. In none is information of this kind more anxioufly wifhed for than in Gonorrhœa. The hopes and fears of patients lead them equally to wifh for it; but, from various caufes, and more particularly from want of attention to the exact fite of the difeafe, the duration of Gonorrhœa has always been a matter of much uncertainty.

I have

I have obſerved above, that, on diſſection, four different ſet of parts are found at different times to be the ſeat of Gonorrhœa. When the running proceeds from the extremity, or from within about an inch and a half of the extremity of the penis, as happens in perhaps nine caſes out of ten, there will, for the moſt part, be much cauſe to hope that a cure will ſoon be obtained. In ſuch inſtances, when the patient is otherwiſe in good health, and when he does not interrupt the operation of the neceſſary remedies by improper conduct, the diſeaſe will not commonly endure a fortnight. Nay, a cure in ſuch circumſtances is often obtained in two or three days: but, whenever the lower parts of the urethra are affected, particularly when the proſtate gland and other parts about the neck of the bladder are diſeaſed, the running, in almoſt every inſtance, proves obſtinate. Even our moſt powerful remedies in other caſes of clap are here doubtful in their effects. Hence

no certain opinion can be formed of the event of the diseafe.

When thefe deep-feated parts are affected, the diseafe proves always tedious, whatever the habit of body may be; but it neceffarily proves much more fo when the conftitution labours under any general affection, particularly when fcrophula prevails, than when the patient is found and healthy. Indeed a fcrophulous taint exifting even with the moft fimple cafe of clap, is apt to render it obftinate; I am fo much convinced of this being the cafe, that in every inftance of clap occurring in fcrophulous patients I always give a guarded prognofis of the event. Cures are fometimes indeed obtained eafily, even in patients of this defcription; but, for the moft part, the difcharge goes on for a great length of time, and refifts the effect of every remedy we employ to remove it.

This uncertainty which takes place in the treatment of Gonorrhœa, and the great length of time to which the difcharge,

charge, in ſome inſtances goes on, together with the many untoward and unexpected occurrences which often happen during the cure, tend altogether to render this branch of practice the moſt diſtreſsful of any in the province of medicine. In a great proportion of caſes a cure with proper treatment is eaſily and ſpeedily obtained; but every candid practitioner will admit that caſes often occur in which the diſcharge continues obſtinate for a great length of time, even under the uſe of the moſt powerful remedies with which we are acquainted. But, by diſtinguiſhing between one ſtage of the diſeaſe and another, and thus giving an opinion to patients of the probable event of it, practitioners would avoid a good deal of embaraſſment which they often experience, from giving ſo indiſcriminately as they commonly do, a favourable prognoſis at the commencement of every caſe of clap.

In forming a prognoſis, it ought always to be kept in view, that however

mild the ſymptoms may be at firſt, they may very quickly and unexpectedly become ſevere, by the diſeaſe proceeding from one part of the urethra to another, or even by the inflammation in the part which was at firſt affected becoming more ſevere. This ariſes from various cauſes, and often from circumſtances which it is not in the power of practitioners to prevent. It ſometimes occurs, indeed, from the uſe of improper remedies; particularly from acrid injections being uſed with too much freedom; but it happens much more frequently from other cauſes, particularly from the tendency which inflammation in one part of a membrane has to ſpread itſelf over the whole of it, and to the miſconduct of patients, who, inſtead of living as they ought to do, very commonly proceed, during the cure, in the ſame courſe of riot and debauchery by which they were at firſt expoſed to infection. Some patients, even under ſuch circumſtances, will no doubt get well; but there is not a more undoubted fact than

this,

this, that the cure of the diſeaſe is for the moſt part both difficult and uncertain where the patient lives in a riotous and ntemperate manner.

SECTION III.

General Obſervations on the Cure of Gonorrhœa Virulenta.

GOnorrhœa, as I have obſerved above, has, till of late, been very generally conſidered as depending upon an affection of the conſtitution; or at leaſt the diſcharge has been ſuppoſed to be of ſuch a nature as at all times to affect the conſtitution, and therefore that a cure could not be obtained but by the uſe of remedies which operate upon the ſyſtem at large.

For a conſiderable time mercury was chiefly relied upon. It was employed on the ſuppoſition of Gonorrhœa being a

ſymptom of Lues Venerea; but experience having ſhewn that no advantage was derived from mercury by itſelf, other remedies were employed along with it. Theſe conſiſted chiefly of demulcents, evacuants, and aſtringents.

By a plentiful uſe of mucilagenous drinks, and other demulcents, it was meant to ſheath the bladder and urethra more effectually from the acrimony of the urine, and at the ſame time to render the urine itſelf leſs acrid. Purgatives were employed for the purpoſe of carrying off the morbid matter of the diſeaſe, and nitre and other remedies were given with a ſimilar intention; and laſtly, as the running was ſeldom leſſened by the uſe of any of theſe, but, on the contrary, being frequently increaſed, bark, aſtringent balſams, and other corroberants, were preſcribed for putting a ſtop to it. In ſome caſes mercury was continued during the whole courſe; in others it was left off at the time of entering upon the uſe of aſtringents.

The

The practice of physic when this prevailed being in most points highly improved, we are astonished to find such deficiency as this evinces, in the treatment of a disease which necessarily fell under daily observation. If patients had been left to themselves, without any interference on the part of practitioners, the disease would often, in the course of time, have disappeared without any injury being done to the constitution; for we know that a simple clap will, in most instances, dry up whether any remedies be employed or not; but, by the liberal use of strong purgatives, and especially when this was conjoined with a low diet and a course of mercury, the constitution was so much debilitated that this alone rendered almost every case that occurred exceedingly obstinate: hence Gonorrhœa was considered as the most distressful as well as one of the most dangerous diseases to which the human species was liable. Lues Venerea was, for the most part, easily cured by mercury; but no advantage

vantage was derived from this remedy in Gonorrhœa: the diſeaſe uſually proved exceedingly obſtinate, and was very apt to terminate either in gleet or in obſtructions of the urethra.

It ſoon appeared to practitioners of obſervation, that the medicines employed in Gonorrhœa, inſtead of proving uſeful, rather did harm; but the period was not yet arrived in which a more effectual remedy was to be propoſed. Some, however, went ſo far as to ſay that medicines of every kind might be avoided, as they had found, from experience, that the diſeaſe went off both more eaſily and more quickly when left to itſelf than it ever did with the remedies at that time in general uſe. A low diet, mercury, and evacuants of different kinds, did much harm, as we have already obſerved, by inducing ſuch a degree of debility and relaxation as materially affected the conſtitution; and the draſtic purgatives, of which large dozes were given daily, proved highly prejudicial, by the irritation which they excited.

In

In certain ſtages of clap a ſtrong purgative never fails to increaſe the pain; to excite a more frequent deſire to make water; and to increaſe the diſcharge: nay, I have known various inſtances of a return of all the ſymptoms of Gonorrhœa being induced by the operation of a briſk purgative, long after the patient conſidered his cure as complete.

We need not therefore be ſurpriſed at the propoſal of laying all ſuch remedies as theſe aſide; and it muſt be admitted that a cure will often take place, that is, the running would diſappear, together with all the ſymptoms which attend it, without the aid of medicine. This would frequently happen where the diſeaſe was mild; where the patient was poſſeſſed of a healthy conſtitution; and where the running was not kept up by any impropriety on the part of the patient. The running would diſappear here, as happens in corryza and other inſtances of matter proceeding from inflamed ſurfaces, whether any remedies ſhould be employed

employed or not: but this would ſeldom or never happen where the ſymptoms were ſevere, nor where the patient did not live in every reſpect as he ought to do. In all ſuch caſes the cure would prove tedious and uncertain, and the conſtitution would frequently be ruined, in the attempt.

When the mode of cure we have mentioned was propoſed, an opinion prevailed that the diſcharge was kept up by ſome general affection of the conſtitution, and that nothing therefore could be ſo ſafe or ſo proper as to allow it to run as long as any part of the morbific matter by which it was produced continued. It was at that time admitted by all, that Gonorrhœa was of the ſame nature with Lues Venerea. Chancres, as well as all other venereal ſores, were kept open till cures were obtained by the internal uſe of mercury. An erroneous idea prevailed of ſome advantage being derived from the diſcharge which they produced; and hence, even by thoſe who ſaw clearly that no benefit was ob-

obtained from mercury in Gonorrhœa, it was ſtill conſidered as the beſt practice to allow the diſeaſe, as they ſaid, to diſcharge itſelf in this manner.

Even granting that the matter of Gonorrhœa were the ſame with that of Lues Venerea, there is no cauſe to imagine that any advantage would enſue from this practice: but we now have no reaſon to doubt of the two diſeaſes being perfectly different. A practice, therefore, which at one period might have been judged proper in one diſeaſe, would now be inapplicable in the other; and hence it has, very generally, been laid aſide, although not yet given up by ſome individuals.

From the obſervations we had occaſion to make in the laſt chapter, as well as from other circumſtances, few will now doubt that the matter in Gonorrhœa proceeding in moſt inſtances from an inflamed ſtate of the membrane of the urethra and contiguous parts, gives a local affection only, without being productive of any general diſeaſe of the conſtitution.

From

From this view of the ſubject, it is obvious that no great advantage is to be expected from remedies applied to the ſyſtem at large, and that a cure is to be looked for from the uſe of local remedies only. In the treatment of a ſimple ſore, of a cut, a burn, or excoriations from any cauſe whatever, we would not ſurely expect to ſucceed by mercury, purgatives, or any remedies directed to the conſtitution. In all ſuch affections we truſt to local remedies, unleſs the preſence of fever, or ſome other general affection, render other remedies neceſſary. For the ſame reaſon we ought, in Gonorrhœa, to depend entirely upon ſuch remedies as act chiefly upon the parts affected ; no others being neceſſary if it be not occaſional blood-letting, and other evacuations, and theſe only where fever, plethora, or much inflammation take place.

In local affections of other parts our remedies are eaſily and directly applied : in the urethra ſome nicety and attention is neceſſary, not only in the mode of apply-

ing them to the diſeaſed parts, but in judging of the period of the diſeaſe, or rather of the ſtate of the parts to which they are to be applied: in other ſituations theſe circumſtances fall directly under view, and we judge from appearances of the propriety of applying one remedy or another. In the urethra we are directed entirely by the ſymptoms, and we judge from theſe of the remedies to be employed, as well as of the parts to which they are to be applied being in a fit ſtate for receiving them or not.

If the parts affected in Gonorrhœa were always the ſame no difficulty would occur in the application of our remedies; but, although the matter in the commencement of the diſeaſe proceeds in perhaps every inſtance from inflammation, yet, in ſome, parts are affected with inflammation, to which it would be improper and even hazardous to apply the ſame remedies which in a great proportion of caſes are uſed with much ſafety and advantage.

We

We ſhall afterwards have occaſion to ſhew that, in certain circumſtances of Gonorrhœa, bougies may be uſed with much benefit; but, for the moſt part, we depend entirely upon injections, and chiefly upon ſuch as are of a drying, aſtringent nature. Now it is obvious, that although we may with ſafety apply an aſtringent ſolution to an inflamed ſurface, as happens daily where the membrane of the urethra only is affected, yet that much riſk may enſue from the ſame ſolution being applied to the ducts of inflamed glands; in the one caſe the diſcharge produced by the inflammation will be leſſened and ſoon removed, and the inflammation itſelf will ſubſide, while, in the other, by a ſudden ſtop being put to the diſcharge of a gland already in a ſtate of increaſed irritability, more inflammation will be excited, the parts affected will become ſwelled and painful, and at laſt the diſcharge will burſt forth with redoubled violence.

That

That this frequently happens in the course of business every practitioner of candour will admit: nay, there are few patients who have been liable to different attacks of this discharge, who have not met with it in some degree. For a day or two the running will often disappear, and they consider the cure as complete, when after some degree of tension and uneasiness along the greatest part of the penis, particularly in the perineum, the discharge recurs as before, with every appearance of a recent infection.

As there are many who condemn the use of injections in Gonorrhœa, it is alledged that this is one of the inconveniences which they produce; but we shall presently have occasion to shew that this is by no means the case, and that it proceeds entirely from a misapplication of the remedy; from using it in a state of the disease for which it is improper; and not from the remedy itself being of a hazardous nature.

This leads us to revert to the necessity there is for distinguishing between one

ſtate of Gonorrhœa and another. In the deſcription of the ſymptoms, I remarked that they are evidently diſtinguiſhable into four ſets, indicating four ſtates or ſtages of the diſeaſe; and as it is a point of the firſt importance in practice to have theſe different ſtates clearly marked, we ſhall now proceed to treat of them in ſeparate ſections.

SECTION IV.

Of the Firſt Stage of Gonorrhœa.

IN the firſt ſtage of Gonorrhœa the running is never accompanied with violent ſymptoms. The extremity of the urethra becomes red, full, and ſomewhat prominent. The glans becomes tender and irritable, and ardor urinæ takes place in a greater or leſſer degree, according to the extent of the inflammation. For the moſt part the heat of urine is inconſiderable; but

in

in ſome inſtances, even in this ſtage of the diſeaſe, it is ſo ſevere as to excite a good deal of diſtreſs. Chordee ſometimes occurs, but ſeldom in any conſiderable degree.

In the hiſtory of the diſeaſe we have ſeen, that in this ſtage of it the membrane of the urethra alone is affected, that is, the inflammation by which the diſcharge is produced has not extended to any other part.

We judge that this is the caſe when theſe ſymptoms only occur which have juſt been enumerated; when no glandular ſwellings are diſcovered along the courſe of the urethra, and particularly when the running proceeds entirely from within an inch, or an inch and a half of the extremity of that canal.

This circumſtance of the diſcharge in Gonorrhœa proceeding from the extremity of the urethra, is at all times a proof of the inflammation not having advanced farther than to conſtitute what I have denominated the firſt ſtage of the diſeaſe. No glandular ſwellings are ever diſcovered

while the running proceeds from these parts; and on dissection after death, the membrane of the urethra alone is found inflamed: but in some instances the discharge proceeds even from the superior parts of the urethra, while none of the contiguous glands are affected. This I consider as constituting the first stage of the disease, equally as when the extremity of the urethra is alone affected. The symptoms are not more violent in the one than in the other, and the method of cure is the same in both. It must, however, be admitted, that we do not frequently meet with this; for where the upper part of the urethra is affected, the inflammation is very apt to spread to the contiguous glands, and thus terminates in the second, third, or, perhaps, fourth stage of the disease.

We ascertain the place in the urethra, from whence matter is discharged, not merely from the height to which the pain or uneasiness with which it may be accompanied extends, for this proves often an equivocal mark of distinction, but

from

from compreſſing the paſſage at any given ſpot, and preſſing out all the matter between it and the end of the urethra. If, on removing the preſſure, more can be brought down, we are ſure that it muſt come from a greater height, and by proceeding in a gradual manner upwards we may thus, with very little attention, diſcover almoſt the exact ſpot from whence the diſcharge proceeds. It will afterwards appear that our being able to do ſo is of importance in conducting the cure.

From what has been ſaid it will appear, that in this ſtage of the diſeaſe the running proceeds entirely from inflammation of the membrane of the urethra, without any affection of the glands which open into it; and in the removal of this the cure entirely conſiſts.

Where the inflammation is conſiderable, as we judge to be the caſe when the ardor urinæ is ſevere, and eſpecially when it occurs in a very full habit of body, it may be proper to preſcribe blood-letting, a doſe or two of any gentle laxative, and a low,

cooling diet. At the ſame time violent exerciſe of every kind ſhould be avoided, particularly riding on horſeback.

Inflammation, however, in this ſtate, is ſeldom ſo conſiderable as to render blood-letting neceſſary: in ordinary caſes we now truſt to the uſe of injections alone, and in all periods of the diſcharge I uſe them with equal freedom. Even where blood-letting, and a ſtrict attention to an antiphilogiſtic regimen is neceſſary, I have never any difficulty in beginning immediately to the uſe of injections.

Thoſe who are not in the daily practice of uſing injections, are afraid of preſcribing them ſo generally as they ought to do: ſome, indeed, never employ them in any caſe, from the prejudice being ſtrong which ſtill prevails againſt them among almoſt all the older practitioners, while others admit that they may be uſed with ſafety and advantage, in the latter period of the diſeaſe, but never in the beginning, or while the inflammation continues in any degree ſevere.

This,

This, however, is a timidity that will ſoon vaniſh with all who venture upon a more general uſe of them. They will find that injections, of a ſufficient degree of aſtringency for removing the diſcharge, may in this ſtate of Gonorrhœa be employed with perfect ſafety, even in the commencement of the diſeaſe, and whether the inflammation which takes place be mild or ſevere.

An idea is ſtill entertained by many, that the running ſhould not be ſtopped till ſome of the virulency by which it was produced is carried off; and hence they object, as we have juſt obſerved, to the early uſe of injections. But, as we have ſeen that Gonorrhœa is a local affection, and as we know that in other parts of the body local inflammation may at all times be removed with ſafety, nay, that it is the beſt practice to attempt it, we might from this alone infer, that it would be equally proper here. But independent of this, I can with confidence aſſert, and all who employ injections generally will do ſo, that

they may in this ſtage of Gonorrhœa be uſed at all times, and with more certainty of proving ſucceſsful the more early they are applied. Of this I am ſo clearly convinced, that I would adviſe all who have it in their power, to employ injections inſtantly on the diſcharge taking place. They commonly, indeed, prove ſucceſsful at whatever period they are uſed; but I have uniformly found that they act more quickly in the commencement of the diſeaſe than in the later ſtages of it.

While practitioners differ in opinion reſpecting the moſt proper period of Gonorrhœa for uſing injections, they likewiſe differ in their ideas of the kinds of theſe remedies beſt calculated for the periods in which they are employed. In the commencement of Gonorrhœa, and at all times when much pain takes place, it is the opinion of many that emollient injections only ought to be uſed, ſuch as warm oil, emulſions of almonds, infuſions of althea, and lintſeed: but in this there appears to be ſome miſtake; and I can decidedly ſay ſo from hav-

ing

ing often experienced the inefficacy of the practice.

On firſt entering upon buſineſs, I found it the opinion of many who uſed injections with freedom, that thoſe of the emollient kind ought alone to be adviſed while much heat of urine, or any conſiderable degree of inflammation continued. Theſe, it was imagined, would ſheath and protect the parts from the acrimony of the urine, and on the inflammation ſubſiding, they conceived that injections of an aſtringent nature might be uſed with more ſafety. The opinion was plauſible, and ſupported by ſome of our beſt practitioners; I was therefore induced, along with others, to go into it, but it ſoon appeared that no advantage was to be derived from it: on the contrary, it was evidently the cauſe of much diſtreſs, by rendering the cure of Gonorrhœa much more tedious than it otherwiſe might have been; for injections of the emollient kind never tend to ſhorten the continuance of the diſcharge, and often render it more fixed and permanent,

nent, by relaxing the parts from whence it proceeds.

Neither are injections of this description necessary as a preparative to those of the astringent kind: in this conviction I have for many years past laid them altogether aside, and during this period have used none but such as are evidently astringent; and although I employ them with all manner of freedom, I have never perceived any bad effects arise from them.

In this state of Gonorrhœa injections of the astringent kind may be used with safety and advantage, from the very commencement of the discharge, as well as at any period of the disease, whatever the degree of inflammation may be. Instead of increasing the inflammation, they tend, when of a proper strength, to lessen it; they relieve more immediately than any other remedy, the ardor urinæ; and they commonly lessen or remove the discharge in a very short space of time.

In all cases, therefore, of this kind, where we suppose the disease to proceed entire-

entirely from the membrane of the urethra, I pay no regard to the continuance of the running; the patient is immediately put upon the ufe of injections, and no harm ever enfues from it.

There is only one fymptom which, in this ftage of clap, precludes the immediate ufe of injections, viz. pain and fwelling of one or of both teftis: a perfeverance in the ufe of injections during the continuance of this fymptom very commonly does harm, and ought not therefore to be advifed; not that they tend to increafe the inflammation, even of the teftis, but by removing the difcharge from the urethra, they deprive us, as we fhall afterwards fee, of one of the moft effectual remedies for a fwelled tefticle, proceeding from Gonorrhœa.

A variety of aftringent injections are employed by practitioners, but fome proving more effectual than others, an inveftigation of this part of our fubject is thereby rendered neceffary.

Almoſt any aſtringent injection will leſſen the diſcharge. Port wine, and claret, duly diluted, ſometimes anſwer. I have often ſucceeded with a tea-ſpoonful of brandy added to half an ounce of roſe water: nay, roſe water itſelf, or even cold water directly from the ſpring, will often give a ſtop to the diſcharge; but, for the moſt part, the effects of theſe are only temporary. In ſlight affections, indeed, they ſometimes complete the cure, but in general we are under the neceſſity of employing aſtringents of a more powerful kind.

Among the firſt injections uſed in Gonorrhœa, mercury, in one form or another, was a conſtant ingredient. It was not, however, employed as an aſtringent; for at that period the uſe of aſtringents of any kind would have been conſidered as hazardous. Being applied in this manner directly to the ſeat of the diſeaſe, it was ſuppoſed that it might act as a ſpecific in the cure of it. But although I have given full and complete trials to injections of the mercurial kind, and in every variety of form,

form, I have not, in any inſtance, found them to prove more effectual than other aſtringents. In order to aſcertain the point to which I allude, with as much certainty as poſſible, I have repeatedly made it the ſubject of experiment. Of different patients in Gonorrhœa, all nearly diſtreſſed with ſimilar ſymptoms, ſome have been made to employ a mixture of calomel with mucilage and water; others have uſed quickſilver diſſolved in mucilage, while ſome have at the ſame time been uſing injections in which mercury did not enter as an ingredient.

I admit that in moſt of theſe inſtances mercury proved ſerviceable, but by no means in ſuch a degree as many of the articles with which it was put, upon this comparative trial. There is no cauſe, therefore, to imagine that it acts as a ſpecific in the cure of clap.

To prevent interruption in this part of the work, formulæ will be given in the Appendix to this volume, of all the preparations I wiſh to recommend. Of mercurial

rial aſtringent injections, the preſcriptions No. 1, 2, and 3, are perhaps the ſafeſt and beſt that can be uſed.

Calomel uſed in injections ſeems to act in a ſimilar manner with lapis calaminaris, armenian bole, and other aſtringent earths; not by any ſpecific virtues with which they are endowed, but by reſtoring tone to parts weakened by the diſeaſe. It is in this manner, I conclude, that all of theſe articles act in the cure of Gonorrhœa; and in caſes that are not particularly obſtinate, they very commonly prove effectual. Lapis calaminaris, or tutia finely levigated, ſuſpended in thin mucilage, makes a very ſafe and uſeful injection. No. 4th and 5th are formulæ of theſe; and No. 6 is a preſcription of a gentleman retired from buſineſs, who, at one period, was in very extenſive practice in London, and who in the courſe of much experience in this particular branch, gave the preference to articles of this kind over all others that he ever employed.

Theſe

Theſe earths poſſeſs one important advantage for this purpoſe: they never do harm, in whatever quantity they are uſed. If levigated with ſufficient care and attention, they may be uſed in any quantity that the liquid in which they are conveyed can be made to ſuſpend.

Allum diſſolved in water makes a ſafe and uſeful injection. It proves equally ſafe, and ſtill more powerful, when conjoined with a decoction of oak bark, or an infuſion of galls, for which preſcriptions are given No. 7th 8th, and 9th.

Kino, an aſtringent lately much uſed in Diarrhœa, proves alſo an uſeful ingredient in injections for Gonorrhœa. I have in various caſes found it prove ſucceſsful where other articles had failed, and I have not obſerved that it ever does harm. As it is not very ſoluble in water it becomes neceſſary to ſuſpend it when in fine powder, by means of mucilage, as is preſcribed No. 10th and 11th.

Opium proves often an uſeful ingredient in injections of this kind; and as it

is

is equally ſerviceable whether much pain takes place or not, I conclude that it does not act ſo much as a ſedative as it does as an aſtringent. No. 12th and 13th are formulæ of injections with opium.

Some of the aſtringent balſams, properly combined with water, make a good variety of injection for Gonorrhœa, particularly the balſamum canadenſe, and balſamum copaiba, as in No. 13th, and 14th.

Lead, in various forms, proves highly ſerviceable in theſe injections. Ceruſſe ſuſpended in mucilage and water is often employed with advantage; but acetum lythargyri, and ſaccharum ſaturni diſſolved in water are moſt to be depended on. Formulæ of theſe are given in No. 15th, 16th, and 17th.

Of all the aſtringent injections, however, which I have uſed, none prove ſo powerful as white vitriol diſſolved in water. In the quantity of a grain and half to an ounce of water, it ſeldom creates much irritation, and it does not often fail in this variety of the diſeaſe, in which alone in-

jections

jections of any kind ever prove materially useful. No. 18th is the form of injection, which, in the common occurrences of daily practice, I am in the habit of using; and No. 19th is a combination of vitriol and acetum lithargyri, which, in a few cases, I have found to answer better than either of these articles separately.

Many other astringents might be enumerated, from which very useful injections might be prepared, but the formulæ which I have given contain the most powerful of any with which we are yet acquainted. None of them will at all times prove successful; for even in this the most simple variety of the disease, the most active remedies will in some instances fail: but I can from much experience in this branch of practice assert, that it will seldom happen where the injection is properly managed and duly persisted in.

The vitriolic injection, No. 19, I have mentioned as the most useful formula of any; but it will sometimes happen that a case will readily yield to others which has

long refifted this. When we do not, therefore, foon fucceed with one injection, we ought, without lofs of time, to have recourfe to others, by which our purpofe will be more eafily accomplifhed than by continuing to employ the fame for any length of time together.

In all thefe injections the different ingredients are in fuch proportions as beft fuit the general courfe of bufinefs. This was a point of much importance to afcertain, and fo far as my obfervation goes, I have done fo; but cafes will, no doubt, occur, from time to time, in which fome variety of ftrength is neceffary. All injections of this kind fhould be of fuch a ftrength as to excite fome degree of irritation in the urethra, but by no means fo ftrong as to create much pain: hence, where the preparations I have mentioned do not anfwer the purpofe, they fhould be made ftronger; and when of fuch a ftrength as to excite fevere pain, they fhould be more diluted.

This,

This, I may remark, is an object requiring much attention, for while it is obvious that injections muſt do harm when their ſtrength is more than it ought to be, it is equally certain that little or no advantage will be derived from them when they are too weak. I have known a cure accompliſhed in three days, merely by making an injection of a ſufficient ſtrength, where the diſeaſe had previouſly gone on for two or three months, from want of attention to this point. I conſider this, indeed, as one of the moſt important points in the treatment of Gonorrhœa, nor does any thing diſtinguiſh the practitioner of experience with ſuch certainty, as his being able to adapt the ſtrength of the injections which he employs to the particular circumſtances of every caſe which falls under his management.

In the application of injections there are two circumſtances which more particularly require attention, viz. the manner of throwing them up, and the frequency of uſing them.

They may be thrown up either with a ſmall bag of reſina elaſtica, fitted with a pipe, or with a common ſmall ſyringe: whether the bag or ſyringe be uſed, the pipe ſhould be perfectly ſmooth, of a conical form, not above half an inch in length, and the cone of ſuch a thickneſs near to the root, as not to allow the pipe to paſs above a quarter of an inch into the urethra.

The bag or ſyringe being filled with the injection, and the patient ſeated with his breech over the ſide of a chair, ſo as to prevent the perineum from being preſſed upon, the pipe, when well oiled, ſhould be inſerted into the urethra, as far as it will go, with the right hand, while, with the left, he graſps the penis, and pulls it forward upon the pipe. He muſt now throw the injection up in ſuch a manner that it may reach the fartheſt part of the urethra that is affected, but not with ſuch force as to excite pain.

When the diſcharge proceeds from near the extremity of the penis, very little force

is required for this purpose; but when the upper part of the urethra is affected, if the injection be not thrown up with some degree of firmness, it will not reach the seat of the disease, and hence no advantage will be derived from it. Previous, therefore, to the use of injections, the part of the urethra, whence the discharge proceeds, should be ascertained, and it can be easily done in the manner we have mentioned above.

In using injections it is judged proper by some to desire the patient to prevent them from passing farther in the urethra than the seat of the disease; lest, by forcing some of the matter along with the liquid, the infection should be carried to parts which otherwise might not have been injured. For this purpose the patient must compress the urethra with the middle finger of his left-hand, at that point to which it is meant the injection should go; while the syringe or elastic bag is employed for throwing it up in the other. But although there is no necessity

for throwing injections farther than the feat of the difeafe, there is no caufe for this anxiety in preventing them. It does not appear, that in this manner, the infection is ever communicated from one part of the urethra to another; at leaft I have never met with an inftance of it, and I have feldom pointed out this to my patients as a neceffary piece of attention. While it does not, therefore, anfwer any good purpofe, it certainly renders it more difficult for the patient to throw the injection properly up, as he cannot both make preffure upon the upper part of the urethra, and, at the fame time manage the fyringe with that exactnefs which it requires.

The point, however, of moft importance in the ufe of injections is, the frequency with which they fhould be thrown up; it is not enough that we difcover a compofition that will accomplifh a cure, if we do not ufe it with that frequency which the nature of the difeafe requires. In common practice the patient is defired to inject the liquid two or three times a day: this, if the

the injection be of a proper ſtrength, will in courſe of time effect a cure; but I am perfectly convinced, from much attention to the ſubject, that cures would be much more ſpeedily obtained were injections to be more frequently thrown up. Inſtead of two or three times a day, I cauſe them be uſed ſeven, eight, or ten times daily; by which the cure, inſtead of being protracted for ſeveral weeks, is often compleated in as many days.

This, I muſt obſerve, is a point of ſuch importance in the cure of Gonorrhœa, that nothing can compenſate the neglect of it. The inefficacy of injections is frequently held forth as one material objection to them, but, for the moſt part, their failure will be found to depend, in a great meaſure, upon this circumſtance. Patients ought, therefore, to be urged to uſe them, at leaſt as frequently as I have mentioned. When indeed the diſcharge leſſens, or diſappears entirely, there is no neceſſity for uſing injections ſo frequently; but while it continues undiminiſhed, the more fre-

quently the remedy is applied to the parts from whence it proceeds, the more quickly will it be removed.

On laying injections aside, even after the running has disappeared entirely, and when there is therefore cause to suppose that a cure is obtained, the discharge often returns with equal severity as at first, either from excess in wine, or over exertion in bodily exercise. In such circumstances the injections must again be employed, and used with as much frequency as before, care being taken not to leave them off till some time after the running has again disappeared.

When the discharge returns repeatedly it is apt to weaken and relax the parts so much, that this alone comes at last to constitute a new disease, forming a variety of what in general is termed gleet. This, however, requires remedies of a different kind, and will fall to be considered in a different chapter.

It will be remarked that I have only slightly taken notice of any other remedies in

in the treatment of Gonorrhœa: I have purpofely done fo, from full conviction of the inefficacy of all remedies that are not immediately applied to the urethra, and from finding that a proper ufe of injections never fails to prove fuccefsful, where a cure by any means can be obtained.

Where much pain and inflammation takes place, I have obferved above that fome advantage may be obtained from blood-letting, and a ftrict attention to an antiphlogiftic regimen. I think it right, however, to fay, that few cafes occur in which this becomes neceffary. A patient under Gonorrhœa fhould live moderately, but by no means upon fuch low diet as in former times was prefcribed in fuch cafes. He ought to live in fuch a manner as may prevent the inflammatory fymptoms from becoming fevere, but not fo low as to run any rifk of inducing relaxation or debility.

The circumftances which moft particularly require attention are, abftinence from all manner of connection with women, and

and from bodily exertion, ſuch as much walking and riding on horſeback, which more eſpecially affects the parts concerned in this diſeaſe.

In the treatment of Gonorrhœa, where no injections are uſed, where the diſeaſe is either left entirely to nature, or treated with demulcents and purgatives, a regular progreſs towards amendment is, for the moſt part, obſerved in the diſcharge. The matter from being thin, and of a greeniſh hue, or perhaps of a red colour from being tinged with blood, becomes of a thicker conſiſtence, tough, ropy, and of a white or yellow colour: but where injections are employed this ſeldom happens. This natural proceſs is thereby interrupted, and a cure often takes place without any change being perceived in the colour or conſiſtence of the diſcharge.

There are ſome ſymptoms which occaſionally take place in every ſtage of Gonorrhœa, and which, it might be expected, ought to have been more particularly noticed

noticed here, ſuch as chordee, and evacuation of blood from the urethra. But theſe ſymptoms being attended with circumſtances requiring a peculiarity of treatment, quite unapplicable in the ordinary ſtate of Gonorrhœa, and being all of them highly important in their nature, a ſeparate ſection will be allotted for the conſideration of each of them. We ſhall now, therefore, proceed to conſider the ſecond ſtage of the diſeaſe.

SECTION V.

Of the Second Stage of Gonorrhœa.

IN this ſtage of the diſeaſe all the ſymptoms are more violent than in the firſt. The heat of urine is much more ſevere; the whole body of the penis becomes tender,

der, and even painful; and chordee takes place to a very diſtreſsful degree. The matter diſcharged from the urethra is either of an ugly green colour, or deeply tinged with blood, and commonly very fœtid. It is found, on examination, to proceed from the more ſuperior parts of the urethra, generally from about the middle of the perineum, where the patient complains of a ſmart pain upon preſſure, and where one or more ſmall tumors are often perceptible, produced by the inflammation having extended to Cowper's glands.

Although the ſymptoms of the firſt ſtage of Gonorrhœa are commonly very diſtinctly marked, yet they frequently proceed to, and terminate in one of the other ſtages of the diſeaſe, particularly in this which we are now conſidering. This happens from the inflammation extending along the urethra, either from the matter producing the diſeaſe being more than uſually acrimonious; from the effect of improper management on the part of the patient; from the imprudent uſe of irritating or

very

very aſtringent injections; or from the patient being of a habit of body rendering him particularly liable to be acted upon by cauſes apt to excite inflammation.

I conclude that it happens moſt frequently from the firſt and laſt of theſe cauſes, or, perhaps, from a combination of them both; as in a great proportion of caſes of this ſecond ſtate of the diſeaſe we find it taking place almoſt from the firſt day on which the running appeared. It muſt, no doubt, have fallen under the obſervation of every practitioner that this, as well as the third and fourth ſtages of Gonorrhœa, are often induced by the patient living in a ſtate of riot and debauchery; and, in ſome caſes, by the immoderate uſe of irritating injections. But although theſe are circumſtances which in every caſe of Gonorrhœa ought to be rigidly guarded againſt, from their tending to excite one of the moſt diſtreſsful complaints to which the human ſpecies is liable; yet I am convinced, from what has been mentioned, that the worſt ſtates of the

the disease will frequently occur, notwithstanding of all that can be done either on the part of the patient or surgeon to prevent them.

As the practice in this state of Gonorrhœa is materially different from what we have recommended in the first stage of it, the utmost attention becomes necessary in distinguishing between them. In the first, the matter is, for the most part, discharged from within an inch and half of the extremity of the penis; and where the disease does extend farther up the urethra, although the ardor urinæ is sometimes considerable, yet the pain is never so severe as that which arises from the inflammation in the second stage of the disease. In this last, the whole body of the penis, as we have observed above, is tender and painful; the chordee which takes place is highly distressful, and one or more inequalities, accompanied with pain on pressure, are discovered in the perineum: whereas, in the former, any chordee which occurs is for the most part very moderate.

The

The pain is inconsiderable at all times when the patient is not passing water, and no hardness or inequalities are perceived in the perineum.

It is proper to remark, that even in the second stage of the disease, these glandular tumefactions in the perineum are not always at first obvious; but upon pressure with the fingers they are easily discovered, even on their first commencement; and in the more advanced stages of the disease they become perceptible, both to the touch and to the eye. Whenever chordee occurs in a severe degree, the whole penis acquires a firmness and tension, particularly where it runs along the perineum. This, however, is very different from the glandular affections to which I allude: the one is a diffused swelling, extending over the whole, or a considerable part of the penis; it does not continue fixed or permanent, and seems to depend upon a morbid irritability in the muscles of the penis, by which they are easily excited to violent and unequal contractions. The others

are,

are, at firſt, ſmall, circumſcribed ſwellings, painful to the touch, which do not riſe and fall ſpeedily, and which remain more or leſs permanent according as the ſymptoms with which they are connected are more or leſs violent.

Theſe ſwellings proceed, as I have already obſerved, from an inflamed ſtate of Cowper's glands, induced by the inflammation extending along their ducts, which terminate in the urethra, to the glands themſelves.

Inflammation here, when it comes to a height, in a manner ſimilar to what enſues from it in other parts, is very apt to terminate in ſuppuration; and as the formation of matter in the ſubſtance of theſe glands is apt to excite the moſt diſtreſsful conſequences, nothing ſhould be omitted that can tend to prevent it. When matter forms in them, if it be not immediately diſcharged by an external opening, it is very apt to burſt into the urethra, and to produce runnings, which, in ſome caſes, do

do not terminate but with the life of the patient.

On the first approach, therefore, of this second stage of Gonorrhœa, all our endeavours should be employed to remove or lessen the inflammation. If the patient is plethoric he should lose a considerable quantity of blood with the lancet, and ten or a dozen of leeches should be applied to the pained part. Whatever his habit of body may be, the application of leeches should not be omitted, and they ought to be repeated once and again, according to their effects, and to the degree of inflammation and swelling which take place; saturnine poultices should be applied over the part affected; the bowels should be kept open with gentle laxatives, and the patient should be put upon a low, cooling diet.

If, either by the violence of the inflammation, or by an imprudent use of astringent injections, a stop has been put to the discharge, much advantage will be derived from our soliciting a return of it. This,

however, muſt not be done with applications of an irritating nature, ſuch as bougees, and ſtimulating injections, as ſome have adviſed, but it may be attempted with ſafety by throwing up, from time to time, injections of warm oil and other emollients, ſuch as warm decoctions of lintſeed and althea.

But although we find from experience that much harm is done by the application of ſtimulants directly to the urethra, we know that they may be applied to the ſkin both with ſafety and advantage. Thus, when the ſwelling does not ſoon leſſen by blood-letting, and the other remedies mentioned above, I have, in different inſtances, derived advantage from the application of bliſters to the parts affected, and by covering the bites of the leeches with adheſive plaſter; this practice may be adopted even the day after they have been applied. The bliſter ſhould be made to cover the whole perineum.

When the remedies we have adviſed are timeouſly and properly applied they will not often

often fail to remove the inflammation; but when this is not accomplished, and when the swelling or swellings proceed to a state of suppuration, nature should be as much as possible assisted by a frequent and free use of emollient poultices and fomentations, and as soon as a fluctuation of matter is discovered, it ought to be discharged by an opening made the full length of the tumor. In this manner a sore will be produced that will be difficult to heal; but if the habit of body be sound, a cure will be obtained at last, and there is no other method with which I am acquainted that will so readily prevent the matter from bursting into the urethra.

When this unfortunate circumstance takes place, of matter collected in one or more of these glands, finding access to the urethra, scarcely any advantage is to be derived from art in the treatment of it. Injections, as we remarked in the last section, instead of proving serviceable, rather do harm. They cannot reach the cavity of the gland, where alone they might

prove uſeful, and by preventing for a time that free diſcharge of matter, which, in every abſceſs is deſirable, they cauſe it to collect, and alternately burſt out, in greater quantities than before.

When the cauſe of ſuch an occurrence is not ſuſpected, both the patient and practitioner are apt to imagine that it proceeds from the fault of the injection: every variety of the remedy is therefore employed, but nearly the ſame effect reſults from all of them, and the patient, after being teaſed and perplexed for a great length of time, finds himſelf in no degree better than he was at firſt.

By ſome practitioners a courſe of mercury has been adviſed in this ſtate of the diſeaſe, and particularly frictions with mercurial ointment on the perineum; but although I have often ſeen the practice fairly and completely tried, I never knew any advantage derived from it. Neither does mercury prove uſeful in the ſores which enſue from opening abſceſſes in the perineum, proceeding from Gonorrhœa.

On

On the idea of theſe ſores being of the ſame nature with ſuch as ſucceed to buboes in Lues Venerea, mercury is commonly preſcribed; but although I have known it repeatedly uſed, not only for the cure of theſe ſores, but for the diſcuſſion of the previous tumefaction of the glands, I never knew any evident benefit derived from it.

All that in ſuch circumſtances can with propriety be done is, to cauſe the patient live in ſuch a manner as will moſt effectually brace his conſtitution; his diet ought to be of a nouriſhing kind; cold bathing, particularly in the ſea, proves ſometimes uſeful, and, in ſome inſtances, Jeſuit's bark, in large quantities, is given with advantage.

In no period of this ſtage of Gonorrhœa are injections admiſſible, and I ſuſpect that the diſcredit into which they have fallen with many is owing to their being employed promiſcuouſly in every ſtate of the complaint. We have juſt ſeen that they cannot be uſed with any proſpect of ſucceſs, when ſuppuration has actually taken

place, and a very little attention will make it appear that they ought not to be advifed during the inflammatory ftate of the complaint. While the parts are inflamed, inftead of endeavouring to remove the difcharge, we ought rather to try to promote it. Nothing tends with fuch certainty to moderate all the fymptoms; and I have repeatedly obferved that they are all rendered much more fevere by whatever tends, in any degree, to give a check to the running. It is proper, therefore, that the younger part of the profeffion be put ftrictly on their guard againft the ufe of injections in every period of this ftage of Gonorrhœa; a practice which, in the firft ftage of the difeafe, is the only remedy, as we have feen, upon which any dependence ought to be placed, but which in this is evidently fraught with danger to the patient, and therefore with difcredit to thofe who advife it.

Befides the glandular abfceffes of thefe parts, which we have juft defcribed, collections of matter are apt to occur in this

ſtate of the diſeaſe, not only in the cellular ſubſtance of the perineum, but in the corpus cavernoſum of the penis, as well as in the corpus ſpongeoſum urethræ. The treatment of theſe, however, ought to be ſo exactly what we have pointed out for the others, that nothing farther need be ſaid upon it. To prevent, as much as poſſible, the riſk of ſuch collections burſting into the urethra, the matter ſhould be diſcharged by a free opening the whole length of the tumor, as ſoon as it is found to be completely formed.

When collections of matter in theſe parts, whether ſeated in Cowper's glands, or in the contiguous ſoft parts, terminate, as they ſometimes do, in external openings, at the ſame time that a communication is formed with the urethra, the urine eſcapes at the ſore, and thus another diſeaſe is produced, termed a ſinus, or fiſtula in perineo. This falls to be treated like ſinuſes in every other part: the ſeat of the abſceſs muſt be laid open from one end to the other, and by enlarging the

opening in the urethra, if the patient be otherwife in found health, a cure will, for the moft part, be obtained, by endeavouring to heal the fore from the bottom in the ufual way*.

It may be alledged, if this proves fuccefsful where the matter has already formed an opening, both inwardly and outwardly, for itfelf, that a fimilar practice fhould be adopted where the abfcefs has only burft into the urethra. That a free incifion fhould be made into it, and a cure attempted in the manner we have already advifed.

Where the opening into the urethra is fuch as to admit the urine to pafs into the abfcefs, the practice to which I allude ought undoubtedly to be adopted, for no other will prove fuccefsful, and the patient muft remain in a ftate of great diftrefs and mifery while this continues; but while the external teguments remain entire, and while the urine does not find accefs to the

* V. Syftem of Surgery, chap. xv.

abfcefs,

abſceſs, no attempt of this kind ought to be made. However inconvenient the diſcharge of matter from the urethra may be, and however long it may continue, the patient ought rather to ſubmit to it than to the uncertain event of a fiſtulous opening, which always proves tedious and diſtreſsful, with whatever judgment the diſeaſe may be afterwards treated.

SECTION VI.

Of the Third Stage of Gonorrhœa Virulenta.

IN this ſtage of Gonorrhœa, along with ardor urinæ, and the other ordinary ſymptoms of the diſeaſe, the patient complains of a ſevere fixed pain in the upper part of the perineum, accompanied with a ſenſation of fulneſs, and tenſion in all the parts contiguous to the anus. The deſire to void urine is more frequent than in either

either of the two preceding ſtates, and it is commonly paſſed with much pain and difficulty ; often drop by drop. Teneſmus, or a painful and frequent deſire to go to ſtool, often takes place, and, in ſome inſtances, to ſuch a diſtreſsful heighth, as adds greatly to the miſery of the patient.

Even in the commencement of the diſeaſe the pain in making water is in ſome caſes ſo ſevere as to excite heat and other ſymptoms of fever ; and, in the more advanced ſtages of it, I have known the fever riſe to a very alarming height. This ſtate of Gonorrhœa, in ſome inſtances, proceeds from the inflammation ſpreading backward in a ſlow, gradual manner, from the point of the penis, which we have ſhewn to be the ſeat of the firſt ſtage of the diſeaſe, but more frequently it takes place ſuddenly either from the imprudent uſe of injections, from the patient being in a riotous courſe of life, or from his being expoſed to violent exerciſe, either on foot or on horſeback.

On

On examining the parts affected, the penis is, for the moſt part, in a ſtate of tenderneſs and irritability, nearly, indeed, as we have deſcribed it to be in the ſecond ſtage of this diſorder; but, together with this, on compreſſing the parts about the end of the rectum a ſenſe of pain ariſes, which is never experienced in either of the ſtates already deſcribed, and on introducing the finger into the anus, the proſtate gland is found conſiderably ſwelled, and in ſuch a ſtate of irritability that it can ſcarcely bear to be touched.

Even the ſlighteſt degree of this affection excites much uneaſineſs, and the deſire to paſs water ſeldom ceaſes for above a few minutes together; but when the diſeaſe has been of long duration, the proſtate gland, which nearly ſurrounds the urethra, or which rather appears, as it were, to form the paſſage of urine at this part, becomes often ſo much ſwelled as nearly to obſtruct the diſcharge of urine as completely as when the urethra is entirely ſtopped. Thoſe, indeed, not verſant

in this branch of practice are apt to miſtake this affection for ſtrictures in the urethra; of courſe a delay takes place in uſing the proper remedies, and attempts which are frequently made to overcome the ſuppoſed ſtrictures, too often do miſchief. Frequently, indeed, neither a bougie, nor catheter, when employed for removing a ſuppreſſion of urine, proceeding from this cauſe, can be paſſed; for the gland is in ſome caſes ſo much ſwelled as to obliterate the paſſage almoſt entirely, and in others, by ſwelling on one ſide only, the paſſage is thrown altogether over to the other; circumſtances which render the introduction of a bougie either impracticable, or at beſt difficult and uncertain.

As it is in the commencement only of this affection that any material advantage is derived from the interference of art, and as it is a diſeaſe which, in the more advanced ſtates of it excites the greateſt poſſible diſtreſs, we ought inſtantly on the firſt approach of it, to apply ſuch remedies

dies as experience has proved to be moft effectual in removing it.

Of all the remedies that I have ever employed, early blood-letting is almoft the only one from which any obvious advantage has been derived. It ought to be advifed immediately on the firft approach of pain, nor fhould we be deterred by a weakly or delicate conftitution. In a perfon of this defcription the evacuation ought, no doubt, to be more fparingly adminiftered than where plethora takes place; but even in the moft delicate habit of body, a quantity of blood fhould be difcharged in proportion to the ftrength of the patient, in the firft place by the lancet, and afterwards by leeches applied to the parts affected. The practice of blood-letting I confider to be equally neceffary here as in cafes of pleurify: in the latter, indeed, the life of the patient is in greater hazard, but in this his future comfort and enjoyment of life are at ftake. It ought not, therefore, in any inftance, to be omitted.

I fpeak the more decidedly upon this from

from various inſtances having fallen within my own obſervation, of the moſt diſtreſsful conſequences taking place from this remedy having been omitted, and from many others having ended eaſily where it was employed with freedom. It is in the firſt ſtages only of the diſorder, however, in which it acts with much advantage; chiefly, indeed, on the firſt ſymptoms of inflammation taking place, for when the proſtate gland becomes ſwelled and inflamed in any conſiderable degree, neither this nor any other remedy can be depended upon for removing it. After a long courſe of time an enlarged proſtate will ſometimes be found much diminiſhed, but this happens more frequently without our being able to account for it, than as a neceſſary conſequence of any medicine employed for it.

Bliſters do not afford that relief here that we ſometimes derive from them in ſwellings of Cowper's glands, neither is much advantage ever obtained from ſaturnine applications. Opium, whether given by

by the mouth, or in clyfters, proves more ufeful than any other remedy for removing the pain and leffening the irritation; but probably from coming more directly into contact with the difeafed parts, it proves evidently moft fuccefsful when given in clyfters, and it feems to anfwer better in fmall dofes, frequently repeated, than in large quantities given at once. Thirty drops of laudanum, mixed with two ounces of thin ftarch, and thrown eafily into the rectum, very commonly gives immediate relief, and as long as this dofe proves effectual it ought not to be increafed.

While opiates, given in this manner, leffen the irritability of the organs of urine, they alfo give much relief by removing that painful and frequent defire to go to ftool, with which patients in this difeafe are often afflicted.

Hitherto I have faid nothing of the ufe of injections, which are frequently employed in this, as in other ftages of Gonorrhœa, for removing the running. This, how-

however, is a practice that ought by no means to be adopted. It has at firſt been gone into without reflecting upon its tendency, and afterwards perſiſted in merely from having once been adopted. In the ſecond ſtage of Gonorrhœa I had occaſion to remark that the diſcharge, inſtead of being ſtopped, ought rather to be encouraged. The ſame obſervation applies ſtill more forcibly here, where a ſtoppage of the running tends always to aggravate every ſymptom, and where we find conſiderable relief often obtained by our bringing on a return of it. This, as we obſerved in the laſt ſection, ſhould rather be done by the uſe of warm emollient injections, than by ſuch as ſtimulate and give pain. Theſe, I know, are adviſed for this purpoſe, but as I have known them evidently do much harm, even when managed in the moſt cautious manner, and as we find, indeed, that the diſeaſe is often at firſt induced by this very practice, I do not heſitate to ſay that it ought very univerſally to be laid aſide. For a ſimilar

reaſon

reaſon bougies ought never to be employed here.

Emollient injections prove uſeful not merely by ſoliciting a more plentiful diſcharge from the urethra, but by ſoothing the irritability in the parts affected, and thus leſſening the pain; and where opiates are conjoined with them they act ſtill more powerfully in this manner. An infuſion of the heads of poppies and althea root, uſed warm, anſwers particularly well for this purpoſe. Warm poultices, applied externally over the fundament and perineum, alſo prove uſeful. Some advantage too is derived from warm fomentations; and I have known the warm bath afford much relief.

All theſe remedies, however, act as palliatives only; but by their uſe the preſent diſtreſs may be much mitigated, while nature, in the courſe of time, aided by cautious management on the part of the patient, may at laſt accompliſh a cure. At leaſt, this, in the courſe of my obſervation, has happened in ſeveral inſtances where

the ſwelling of this gland has not arrived at any great height; but it has been more frequently the conſequence of rigid attention to regimen than the effect of medicines. We conſtantly find, in this complaint, that whatever excites much heat of body does harm; whether bodily exerciſe, or heating food and drink: hence every thing of this kind ſhould be avoided, particularly much walking and riding on horſeback; and full meals of animal food, eſpecially when wine or other ſtrong drinks are likewiſe indulged in. The diet ſhould conſiſt of milk and vegetables, with no greater proportion of animal food than is neceſſary to ſupport the ſtrength of the patient.

Such drinks ſhould be chiefly uſed as tend to blunt the acrimony of the urine, and to ſheath the parts which it paſſes over; ſuch as infuſion of lintſeed and althea, emulſions of almonds, and water in which gum arabic is diſſolved.

I have inſinuated that I have little confidence in the activity of any medicine for re-

removing ſwellings in the proſtate gland, when it has unfortunately acquired a conſiderable bulk. A deference to the opinion of others requires that I ſhould ſtate the grounds upon which this opinion is formed; this I ſhall do in noticing ſhortly the medicines which have been employed with the view of obviating this complaint.

When other remedies fail, and in ſome caſes even before they are fairly tried, mercury is, in ordinary practice, recommended; but I have much reaſon to think that it very commonly, if not always, does harm.

Even in early practice I had frequent opportunities of ſeeing this complaint, and being led by converſation with others to expect ſubſtantial relief from mercury, I uſed it freely for ſeveral years: I muſt acknowledge, however, that I never perceived any advantage ariſe from it, while, in ſome caſes, evident miſchief was the effect of the practice.

Mercury never had any obvious effect in diminiſhing the tumour, and by encreaſing the irritability of the ſyſtem,

even when given in ſmall quantities, and in the moſt cautious manner, it uſually rendered the parts affected more painful than they were before. On theſe accounts mercury appears to be not only an uſeleſs but a dangerous remedy, ſo that I have now, in ſwellings of this gland, laid it entirely aſide.

Cicuta has alſo been much recommended in ſwellings of this gland; but although I have given it very full and complete trials, I am not ſure that in any inſtance it ever proved uſeful. The diſeaſe, in ſome, has appeared to yield while cicuta was employed, but this was only where a great length of time had elapſed, and not in a greater proportion of caſes than where this remedy was never uſed. But as it may be employed under proper management without any riſk to the patient, where other remedies do not ſucceed, and where it is neceſſary to be doing ſomething, it may be proper to give it a farther trial before any final opinion is formed of it.

Having

Having, in tumours of other parts, obſerved obvious advantages from a decoction of the root of mezereon, I have, in various inſtances, uſed it in ſwellings of the proſtate gland. In ſome it has appeared to prove uſeful, but never ſo evidently as to enable me to ſpeak with certainty about it. When conjoined with ſarſaparilla *, it ſeems, in other caſes, to be rendered ſtill more active, and the mucilage contained in that root, by blunting the acrimony of the mezereon, renders it both more agreeable to the palate and more grateful to the ſtomach.

Among other remedies employed in ſwellings of the proſtate gland ſea bathing and drinking ſea water has been one of the moſt frequent. Where this diſeaſe is connected with a ſcrophulous conſtitution this remedy certainly proves uſeful. It will never remove the tumour ſpeedily; but, by ſtrengthening the conſtitution, it ſeems, in ſuch circumſtances, to render the ſwelling leſs permanent than it uſually

* Vide Appendix, No. 45.

proves to be where this remedy is not employed. It ought, however, to be remarked, that all ſtrong purgatives do much harm. This happens in every ſtage of Gonorrhœa, but eſpecially where the proſtate gland or bladder are affected. By the irritation which they excite they not only induce a more copious diſcharge, but render the inclination to void urine much more frequent and more painful. When ſalt water is uſed, therefore, it ought not to be in greater quantities than will anſwer as very gentle laxatives.

Swelling of the proſtate gland does not terminate as tumours in the other glands of the urethra frequently do, in ſuppuration. When Cowper's glands, or any of the ſmaller glands of the urethra become inflamed, they either ſuppurate or a cure is obtained by diſcuſſion: but, in ſimilar affections of the proſtate this very ſeldom happens. When the tumour does not yield to timeous blood-letting, or when it does not afterwards gradually ſubſide, it either remains nearly of the ſame ſize and hard-

hardneſs, or becomes both larger and firmer till it ends in a real ſchirrus, of conſiderable magnitude.

In this ſtate of the diſeaſe the diſcharge is, for the moſt part, thin and acrid; together with matter from the contiguous parts of the urethra, which are uſually more or leſs diſeaſed, a conſiderable quantity is thrown out of the gland itſelf, forming, as we will afterwards ſee, one of the moſt obſtinate varieties of gleet.

Even in the commencement of this affection of the proſtate, the paſſage of urine, as we have already remarked, is often much obſtructed; but, in the more advanced ſtages of it, this, in ſome caſes, comes to ſuch a height as to be unſurmountable. Whether from the paſſage being completely obliterated by the ſides of the ſwelled gland adhering together, which is alledged to happen, but which I never ſaw, or from the paſſage being contracted by the ſides of the gland ſwelling unequally, it ſometimes happens that neither a bougie nor catheter can be in-

troduced. In this caſe, as a total obſtruction is formed to the paſſage of urine, we are obliged to draw it off by puncturing the bladder, which may either be done above the pubes, or by paſſing the trocar into the bladder from the rectum, or puſhing it up by the ſide of the diſeaſed gland *. It muſt be remarked, however, in forming an opening with a trocar for drawing the urine off from the bladder, that a very enlarged ſtate of this gland precludes every attempt for this purpoſe either in the perineum or rectum. In which caſe it muſt neceſſarily be done above the pubes.

In ſuch circumſtances, all that art can do, is to preſerve a paſſage for the urine, by retaining a canula in the opening, and keeping the patient as free from pain as poſſible with doſes of opium adequate to the diſtreſs in which he happens to be.

* Vide Syſtem of Surgery, chapter xiii.

SECT.

SECTION VII.

Of the Fourth Stage of Gonorrhœa.

IT ſometimes happens that the inflammatory ſymptoms paſs eaſily over the anterior part of the urethra, and ſhew themſelves in more force and violence higher in the paſſage. Thus, although the third ſtage of the diſeaſe, in which, as we have ſeen, the proſtate gland is chiefly affected, is ſometimes produced by the inflammation ſpreading from thoſe parts which are only concerned when the ſecond ſtage of it takes place, yet inſtances often occur of the inflammation paſſing from the point of the urethra along the whole courſe of the paſſage, without any intermediate part of it being much affected, and fixing, in the moſt violent manner, upon the proſtate gland or bladder.

bladder. In ſome caſes the proſtate is affected while the bladder itſelf remains ſound, while in others it paſſes eaſily over that gland, and ſeizes with much violence upon every part of the bladder.

In ſome caſes the bladder becomes affected almoſt on the firſt attack of the diſeaſe. The inflammation ſpreads ſo quickly along the urethra that the bladder is pained in the courſe of a few hours from the commencement of the diſcharge. It more frequently occurs, however, after the running has been of ſome duration, and, for the moſt part, can be traced as the conſequence of much expoſure to cold and dampneſs; of violent exertion in walking or on horſeback, or, as the effect of an injection thrown with too much violence into the upper part of the urethra.

The patient, from the firſt approach of the diſeaſe, complains of much uneaſineſs, which at laſt terminates in ſevere pain over all the region of the bladder, particularly about the neck of it; accompanied with a frequent and painful deſire to make

water,

water, and often with tenefmus. In fome cafes the pain is chiefly feated about the anus, but, in general, all the under parts of the abdomen, particularly about the region of the pubes, are greatly pained, and, in fome inftances, even the kidneys become affected, either from nervous fympathy, or from the inflammation fpreading from the bladder along the ureters.

In general the pain, efpecially after voiding urine, extends to the glans penis, and as this, with the ftoppage which occurs to the flow of urine, are fymptoms which always accompany ftone, cafes of this kind, when the hiftory of the difeafe has been concealed, has been miftaken for ftone in the bladder.

If the running from the urethra has not been ftopped by injections, it continues as if no affection of the bladder had occurred; and in general any interruption that takes place to the difcharge proves only temporary; but along with the ufual running from the urethra, fuch as takes place in one or other of the different ftages

ſtages which we have deſcribed, a conſiderable quantity of matter paſſes off with the urine. This gives the urine a turbid appearance, as if purulent matter was mixed with it, but on examining the depoſition, which is uſually made in the courſe of a few hours, it is found to conſiſt almoſt entirely of mucus.

On a further continuance of the diſeaſe this matter contained in the urine aſſumes a very different appearance. Inſtead of being broken and divided into flakes, as at firſt, it now becomes tough and viſcid, in a very remarkable degree, reſembling iſinglaſs diluted with water to the conſiſtence of jelly. This gelatenous matter is ſuſpended in the urine when firſt voided, but it ſoon ſeparates, and falls to the bottom, where it adheres ſo firmly to the ſides of the veſſel in which it is received, as to be ſeparated from it with difficulty. In ſome caſes this ſubſtance is clear and tranſparent, but, for the moſt part, it is tinged of a yellow hue, and ſomewhat opake.

When

When any conſiderable quantity of this matter has paſſed off the patient is commonly relieved, and continues eaſy for a longer or ſhorter period, according to the degree of inflammation that takes place.

In ſome caſes the quantity of this viſcid matter is very inconſiderable, being no more than what ſlightly covers the bottom of the pot, while in others it ſeems to form more than half of all that comes from the bladder. When in ſuch conſiderable quantities, it tends greatly to reduce the ſtrength of the patient, inſomuch that few conſtitutions are able to bear it long.

From the nature of the parts in which this diſeaſe is ſeated, we would expect that it ſhould be the moſt formidable complaint that Gonorrhœa could induce; but this is by no means the caſe: the diſeaſe deſcribed in the laſt ſection, viz. ſwelling of the proſtate gland, proves always more ſo. Few recover from the one, while cures are obtained by a great proportion of all who

are ſeized with the other. At leaſt in healthy conſtitutions this commonly happens, if the diſeaſe has not been much neglected at firſt. In general, indeed, a conſiderable time paſſes over before a perfect cure is obtained; nay, ſome degree of uneaſineſs, and certain deranged ſenſations, will often continue for a number of years, but after the firſt violence of the ſymptoms is over, they generally become, in a gradual manner milder, till at laſt they vaniſh entirely.

On the firſt approach of the diſeaſe blood-letting is the only remedy upon which moſt dependence ought to be placed, and, when freely practiſed, it ſeldom fails to render the ſymptoms moderate, and of ſhorter duration than they otherwiſe probably would be.

A quantity of blood ſhould be taken with the lancet in proportion to the ſtrength of the patient, and a number of leeches ſhould be repeatedly applied to the neighbourhood of the anus. With reſpect to diet, and other circumſtances, the patient

tient ought to be treated in the manner we have advifed in the laft fection. His bowels fhould be kept moderately open with caftor oil, or other gentle laxatives, and opiates fhould be exhibited in fufficient dofes for leffening, or even for removing the pain. When treating of fwelling of the proftate gland we advifed opiates to be given in the form of clyfters, rather than by the mouth, and this mode of exhibiting the remedy proves equally ufeful here.

With a view more certainly to allay the irritability of the bladder, it has been propofed to inject opium diffolved in water into it: but this appears to be a dangerous experiment. I have known it done, but the patient was nearly killed by it. Convulfions and other alarming fymptoms occured, but not in fuch degree as to prove fatal.

Warm emollient injections, fuch as warm oil, or the form of injection in the Appendix, No. 23, frequently give relief from pain, and give a temporary fufpenfion of that

con-

conſtant deſire to paſs water which often prevails here; and in ſome caſes the ſemicupium proves ſucceſsful when theſe have failed.

A plentiful uſe of mucilagenous drink, ſuch as infuſion of lintſeed and althea root, and a ſolution of gum arabic in water, afford relief in all affections of the urinary paſſages, but in none more than in the one of which we are now treating.

All theſe remedies are meant to alleviate pain and irritation in the commencement of the diſeaſe, and when timeouſly applied, and duly perſiſted in, they very commonly prove effectual; but in the more advanced ſtages of the diſeaſe, when the pain is not ſo ſevere, but when a good deal of uneaſineſs continues, accompanied with a diſcharge of that viſcid matter which we have deſcribed, remedies of this kind do not afford ſo much relief. Opiates will no doubt tend at all times to allay irritation, but blood-letting, which at firſt never fails to give relief, tends now only to weaken the

the patient, without being productive of any advantage.

In this ſituation Jeſuit's bark ſometimes proves uſeful; and I have ſeen inſtances where a few grains of allum added to each doſe, ſeemed to render it more effectual. Balſam of copaiba, and Canada balſam, prove likewiſe uſeful here: but where much benefit is expected from them they ſhould be given in as large doſes as the ſtomach of the patient will permit.

Of all the remedies, however, which in ſuch circumſtances I have ever tried, uva urſi is the moſt effectual. No advantage is derived from it where the proſtate gland is diſeaſed; but in unmixed affections of this kind, where the bladder only is affected, it ſeldom fails to procure relief. It may be given to the extent of a ſcruple at firſt, and afterwards half a drachm of the powder three times a day, in which quantity it ſeldom fails, in the courſe of a few days, to leſſen the proportion of viſcid matter in the urine; by which, and the abate-

ment of pain which at the ſame time takes place, we are always certain that the inflammation alſo is diminiſhed.

On the idea that this affection of the bladder proceeds from a tranſlation of the matter of Lues Venerea from the urethra, mercury is commonly uſed in it; but although I have often given it, I never knew any advantage derived from it; it ſometimes even does harm. It increaſes the irritability of the ſyſtem in general, as well as of the parts more particularly affected.

When affections of this kind have continued long, the bladder is apt to become much thickened and leſſened in diameter: hence, even after all the other ſymptoms are gone, the frequent inclination to paſs urine continues. In ſome caſes this goes on for years; nay, I have known it endure for a great length of time, and only terminate with the life of the patient. It ſeems evidently to be the effect of inflammation, for it ſucceeds to inflammation of the bladder, by whatever cauſe it may be in-

induced. It alſo occurs from ſtrictures in the urethra, when they happen to be conſiderable and of long duration.

For the removal of this thickened ſtate of the coats of the bladder mercury is often preſcribed, and in ſome caſes it has certainly proved uſeful; but it ſeems to prove equally ſo from whatever cauſe the diſeaſe may at firſt have ariſen*.

* This practice of giving mercury in the thickened ſtate of the urinary bladder, which ſucceeds to inflammation, we find recommended by the late Doctor Ebenezer Gilchriſt of Dumfries, to whom we are indebted for much valuable information in different parts of the practice of medicine.

SECTION VIII.

Of Chordee.

CHordee is a painful, involuntary erection of the penis. Patients in every ſtage of Gonorrhœa are, in ſome degree, liable to Chordee; but it occurs much more frequently, and to a much greater height in the ſecond ſtage of the diſeaſe, than in any of the others. It happens at all times of the day, but moſt frequently when the patient is warm in bed, when it is in ſome inſtances ſo ſevere as to deprive him entirely of reſt. During a fit of Chordee the penis becomes hard and painful to the touch, and for the moſt part it is curved downwards in a conſiderable degree.

Chordee occurs in every period of this ſtage of Gonorrhœa, and it ſometimes remains

mains after the heat of urine and all the other ſymptoms are gone, but it is uſually moſt ſevere during the continuance of the inflammation, and becomes more or leſs ſo according as that ſymptom is in a greater or leſſer degree.

I therefore conclude that Chordee is an effect of inflammation, and that it proceeds from irritation, communicated from the nerves of the urethra to thoſe of the contiguous muſcles, by which thoſe unequal degrees of contraction are produced over the whole ſubſtance of the penis, which univerſally take place in this diſeaſe.

Were it owing to effuſions of lymph into the reticular parts of the penis, as ſome have imagined to be frequently the caſe*, Chordee would be of a more permanent nature than we ever find it to be, and theſe effuſions would be apt to terminate in ſuppuration. Now, although ſuppuration is ſometimes the conſequence of in-

* V. John Hunter on the Venereal Diſeaſe.

flammatory tumours in theſe parts, I have never obſerved that it happens in thoſe tumefactions which accompany Chordee. The latter commonly riſe and diſappear again in the courſe of a few hours, and they are more diffuſed than tumours uſually are which proceed to ſuppuration. The others riſe more ſlowly, and they terminate, whether by diſperſion or ſuppuration, in a much more gradual manner.

Of all the remedies I have ever employed opiates prove moſt uſeful in Chordee. The pain and tenſion are ſometimes removed by rubbing the parts affected with laudanum, or with a ſtrong ſolution of opium in water, and by keeping pledgits immerſed in either of theſe, conſtantly applied to them; but the greateſt advantage is obtained from the internal exhibition of opium. Thirty or forty drops of laudanum, given at bed-time, or on the acceſſion of the Chordee, very ſeldom fails in preventing or removing it.

Emollient injections thrown up the urethra, particularly when impregnated with opium,

opium, have alſo a powerful influence in leſſening the violence of Chordee; and as the heat and irritation produced by coſtiveneſs tends greatly to augment the violence of this ſymptom, I have known much advantage obtained from the operation of a gentle laxa ive.

A temporary relief is often derived from the application of a cold ſolution of ſaccharum ſaturni, and I have known the external application of camphor prove ſerviceable: when diſſolved in ſpirit of wine it proves uſeful, but it acts with more advantage when diſſolved in oil. Frictions with mercurial ointment have been much recommended for the removal of Chordee, but as I have commonly found more advantage from rubbing with camphorated oil, I conclude that it is chiefly the emollient properties of the mercurial ointment which render it uſeful, and, therefore, that the inconveniencies which ſometimes occur from mercury, may here be avoided.

In ſome caſes we derive advantage from tying the penis down with a fillet to the

 thigh,

thigh, but it only anſwers in very ſlight affections, and the practice ought never to be adviſed in the more ſevere attacks of the diſeaſe. Being an obvious remedy for counteracting an erection, it is not unfrequently employed in the firſt inſtance by the patient; but I have frequently known it do harm, either from the fillet being applied too tight, or from the parts being in ſuch a ſtate of tenderneſs as to render it altogether inadmiſſible.

When none of theſe remedies ſucceed, blood-letting ſometimes proves uſeful; particularly by the application of leeches to the parts affected, nor ought this ever to be omitted when the patient is of a plethoric habit, or when the pulſe is full. When Chordee takes place in a ſlight degree only, blood-letting is never neceſſary; but whenever it is ſevere, and reſiſts the other remedies we have mentioned, we ought never to heſitate in adviſing it. Blood-letting proves more effectual than any other remedy in preventing that permanent kind of Chordee, which ſometimes

times continues very diſtreſsful long after every other ſymptom of Gonorrhœa has diſappeared.

Opium is one of our moſt effectual remedies in every ſtage of this ſymptom, but particularly where it has been of long continuance. In this ſtate of the diſeaſe I have ſometimes found, where opium has failed, that hen-bane, the hyocyamus niger of Linnæus, has proved uſeful. A grain of the extract, properly prepared, may be given three times a day at firſt, and the doſe encreaſed to two, three, or more grains, according to its effects. I have given to the extent of ſeven and eight grains three times a day, with no inconvenience whatever; but this was after the patient had been for ſome weeks accuſtomed to the remedy.

SECTION IX.

Of Hæmorrhages from the Urethra.

IN the deſcription of the diſeaſe, we have ſeen that the matter of Gonorrhœa is frequently tinged with blood. When the quantity of blood is inconſiderable little or no notice is taken of it, the matter gradually acquires the common appearance, and a cure is accompliſhed in the uſual way; but when a blood veſſel of any magnitude burſts in the urethra, as ſometimes happens when the inflammation runs high, ſuch quantities of blood are diſcharged as prove highly alarming. I have known different inſtances of three or four pounds of blood being diſcharged in the ſpace of a few hours.

On the firſt appearance of this ſymptom complete reſt ſhould be immediately recom-

recommended, for nothing tends more to promote hæmorrhages of every kind than bodily exertion. The patient's bowels ought to be opened with a gentle laxative; his diet ſhould be of a cooling nature; he ought to be kept in a cool, well-aired apartment, and the penis ſhould be immerſed, from time to time, in a cold ſolution of ceruſſa acetata, in equal parts of vinegar and water.

In Hæmorrhages of every kind I have derived much advantage from a plentiful uſe of kino, and particularly in the ſymptom which we are now conſidering. It may be given in the quantity of twenty grains four times a day, and it may be uſed either by itſelf or rubbed with equal parts of gum arabic and fine ſugar, which renders it both more palatable and more grateful to the ſtomach.

In ſome caſes I have derived advantage from aſtringent injections; particularly from an infuſion of red roſe leaves, ſtrongly impregnated with allum, as in No. 21, and from No. 14*, of which balſamum co-

* Vide Appendix.

paiba

paiba forms the bafis. The injections fhould be thrown up with caution, and retained by compreffing the urethra as long as the patient can bear them.

When all thefe means fail, and when there is caufe to fufpect that the patient's life may be endangered by the lofs of too much blood, recourfe muft be had to preffure. I have, in different inftances, put an immediate ftop to the difcharge by inferting a bougie into the penis. When the bougie is large nothing farther is neceffary; but when it does not prove fuccefsful of itfelf, if the difcharge proceeds from the fore-part of the penis, it may be ftopped at once by gentle preffure with a narrow roller, and when it flows from the perineum, by continued preffure with the hand or fingers.

With a view to obtain a long continued preffure, a catheter of elaftic gum may be ufed inftead of a bougie, by which the patient may, with due care and attention, void his urine, while the preffure is continued: but if the bladder is emptied immediately

mediately before the bougie is introduced, it may, for the moſt part, be retained as long as is neceſſary.

Having in this and the preceding ſections conſidered Gonorrhœa in the different forms under which it occurs in men, we ſhall now offer a few obſervations upon the ſame diſeaſe as it appears in females.

SECTION X.

Of Gonorrhœa in Women.

WOmen are leſs ſuſceptible of this diſeaſe than men; and with them it is alſo leſs violent in its ſymptoms, and leſs alarming in its conſequences.

Why men ſhould be more readily infected than women is difficult to explain; but that the diſeaſe ſhould prove more violent in the former is evident. The parts

parts which it attacks are more numerous, and more deeply ſeated; and we find that all the ſymptoms of this diſeaſe are mild or ſevere according as the parts affected are deeply ſeated, or otherwiſe. Hence, as long as the extremity of the urethra only is affected, the ſymptoms of Gonorrhœa are equally violent in both ſexes. During the continuance of the firſt ſtage of the diſeaſe in men, the pain is never more ſevere than we often meet with it in women, nor does it ever become ſo till the inflammation proceeds to a greater depth.

In women the diſcharge proceeds either from the vagina or urethra, and in ſome caſes, partly from both. When the vagina only is affected the pain attending it is inconſiderable, unleſs the matter is ſo acrid as to inflame the clitoris, nymphæ, or labia pudendi, as we ſometimes find is the caſe; but whenever the urethra is the ſeat of the diſeaſe, the ſame degree of ardor urinæ takes place as uſually occurs in men. Nay, in women this ſymptom is often more ſevere, and the inflammation

by

by which it is produced proceeds more readily and more frequently in them to the bladder than it usually does in men; for, in most instances of Gonorrhœa in women, they complain of severe pain over the loins, and all the region of the bladder, and their urine very commonly deposits mucus in such quantities as indicates a considerable affection of that viscus.

This must happen from the passage to the bladder being considerably shorter in them than in men; and the urethra being wider and not so liable to be obstructed, the symptoms arising from affections of this part are neither so severe, nor are they usually of such long continuance.

On examining the seat of Gonorrhœa in women, it is often difficult to determine whether the disease exists or not, and if the patient is inclined to conceal any circumstances connected with her situation, it is altogether impossible to ascertain this point with precision. This uncertainty occurs from the similarity of Gonorrhœa to the matter of fluor albus, a

diſeaſe to which women are ſo very liable; that, in ſome degree, ſcarcely any but the moſt robuſt are at all times free of it. Beſides a ſimilarity in the matter, the heat of urine, and inflammation of the contiguous parts, are often equally ſevere in the fluor albus as they commonly are in Gonorrhœa.

The chief diſtinction which external appearances afford between the two diſeaſes, is, that in fluor albus the matter is of a whiter colour than in Gonorrhœa. In the latter it is ſomewhat of a cream colour, whereas in fluor albus it is uſually of a pale white colour, and of a thinner conſiſtence. It muſt, however, be acknowledged, that theſe means of diſtinction are by no means ſufficient, and that no certainty upon this point can be obtained but by a full account being received from the patient herſelf of all the circumſtances connected with the caſe. When a woman is ſeized with heat of urine, and a diſcharge of matter from the parts of generation, and at the ſame time admits that theſe ſymptoms

toms ſucceeded to her connection with a man labouring under Gonorrhœa, no doubt will remain of the nature of the diſeaſe: but when a patient inclines to conceal the real cauſe of her diſorder, no means with which we are yet acquainted are ſufficient to aſcertain the difference between theſe two diſeaſes.

It fortunately however, happens, that the remedy which anſwers with moſt certainty in the one, proves equally powerful in the other: the remedy I allude to is an aſtringent injection. All the variety of injections enumerated in the foregoing ſections may be uſed with equal propriety here: but it is chiefly the vitriolic ſolution, No. 18, upon which much dependence ſhould be placed. When duly perſevered in, and thrown up five or ſix times a day, it ſeldom fails, in women, to accompliſh a cure of Gonorrhœa, and it proves equally ſucceſsful, as I have obſerved above, in removing the fluor albus.

Where, indeed, the conſtitution is much debilitated, and where the diſcharge is

kept up by general relaxation of the conſtitution, although injections may remove the running, they will not prevent a return of it; but from much experience of their influence I can recommend them as one of the moſt powerful remedies that has yet been uſed for this very diſtreſsful ſymptom, to which a great proportion of the ſex are liable.

In females injections may be uſed with the greateſt freedom, when the diſcharge proceeds from the vagina; but in throwing injections up the urethra more circumſpection is neceſſary than is even required in men. The urethra in women being ſhort, and the ſphincter of the bladder more eaſily forced, if injections are thrown up with violence, they will readily paſs into the bladder; and as this might be productive of much irritation and pain, it ought to be carefully guarded againſt. With proper attention this is eaſily done; and as the running proceeds, for the moſt part, from within half an inch of the extremity

tremity of the urethra, there is no neceſſity for throwing injections farther.

Where the diſeaſe is entirely confined to the urethra or vagina a cure may always be accompliſhed by injections; particularly if theſe be accompanied with a proper attention to diet, and to the ſtate of the bowels: but where the bladder is already affected, other remedies are required. The patient muſt loſe blood in quantities proportioned to her ſtrength; the diet ſhould be very low; her bowels ſhould be kept eaſy with gentle laxatives; and the pain and irritation ſhould be leſſened or removed with doſes of opiates proportioned to the violence of theſe ſymptoms.

In women the mucous glands of the parts affected are apt to inflame, although not ſo frequently as in men, nor are the conſequences which reſult from them ſo apt to prove permanent. This may happen from none of theſe glands being ſo large in women: hence, when they ſwell from inflammation, they do not arrive at ſuch a

bulk, and when they ſuppurate, the abſceſſes which enſue more eaſily heal. They are chiefly ſituated in the labia pudendi, and in the vagina.

Swellings of this kind in women require the ſame method of treatment as in men. Blood-letting, both general and local, ſhould be adviſed on the firſt appearance of the tumours, and the parts affected ſhould be kept covered with a cold ſolution of ſaccharum ſaturni in water and vinegar. When this fails in preventing their increaſe, warm emollient cataplaſms ſhould be adviſed, in order to forward ſuppuration; and this taking place, the tumour ſhould be laid open with a free inciſion from one end to the other.

Where tumours of this kind arrive at a larger ſize than uſual, I have, in different inſtances, both in men and women, diſcharged the matter by the introduction of a ſeton. But as ſetons are not eaſily managed in this ſituation, the mode of opening them by inciſion ſhould be preferred; and it will commonly be found that it anſwers

ſwers

ſwers beſt to lay the abſceſs open through its whole length.

In the treatment of Gonorrhœa in women there are ſome who uniformly preſcribe mercury, although they never adviſe it in men. This they do from an idea of its being more frequently connected with Lues Venerea in women than in men.

I have not found, however, that this is the caſe, or that there is cauſe for mercury being given for this diſeaſe in women more than in men. Gonorrhœa often takes place in women as it does in men, along with Lues Venerea: in ſuch circumſtances mercury muſt no doubt be employed; but by no means on account of the Gonorrhœa. So far as my obſervation goes, the diſeaſe is to be cured in both ſexes in the ſame manner, chiefly, as I have already remarked, by the uſe of aſtringent injections.

It happens, indeed, in women, as it does in men, that Gonorrhœa, particularly the milder forms of the diſeaſe, will diſappear

whether injections are uſed or not. This, in former times, was attributed to the purgative, demulcent, and aſtringent medicines, which in all caſes were uſed in large quantities; but by later experience we know that none of theſe remedies are neceſſary, and that the diſeaſe diſappears as ſoon, and with as much certainty, where none of them are employed, merely by keeping the parts clean, with a proper attention to regimen.

In ſpeaking of cleanlineſs it is proper to remark, that both in men and women it ought at all times to be inculcated, particularly in women, where the matter of Gonorrhœa is very apt to become acrid, and excoriate the parts to which it is applied.

Attention to this circumſtance is often adviſed, on the ſuppoſition of chancres being likely to occur from the matter of Gonorrhœa, where it is allowed to reſt long upon any particular ſpot. Whatever excites attention to cleanlineſs will here prove uſeful; but no practitioner of obſer-

vation

vation will now admit that the advantages arising from it proceed from this cause. Were this the case, excoriations produced in this manner would not heal without the use of mercury; whereas we all know, that affections of this kind, proceeding from the matter of Gonorrhœa, never require mercury, and that they heal easily merely by bathing the parts frequently, and preventing the matter from resting upon them in future.

SECTION XI.

Recapitulation.

I Have thus finished the observations I had to offer on Gonorrhœa as it appears both in the male and female patient; but it may not be improper in this place, by

a ſhort and general recapitulation, to bring the ſubject into one point of view.

1. From the arguments ſtated in different parts of the preceding ſections it appears that Gonorrhœa is a local diſeaſe, proceeding from a ſpecific contagion, and not neceſſarily connected with any other.

2. That the diſcharge of matter which takes place is not the effect of ulceration, but proceeds from an inflamed ſtate of the urethra and contiguous parts.

3. That this inflammation, while confined to the membrane of the urethra, particularly to the parts near to the extremity of the penis, is never productive of any alarming ſymptom: a diſcharge of matter, accompanied with ardor urinæ, and ſome ſlight degree of Chordee, being almoſt the only ones that take place.

4. That the diſeaſe is always formidable in proportion to the depth of parts that are affected, the ſymptoms which oc-

cur being more or lefs violent, and productive of more or lefs hazard, according as the inflammation has reached to Cowper's glands, the proftate gland, or to the bladder.

5. That in the cure of Gonorrhœa no advantage is derived from mercury, or any remedy acting altogether upon the conftitution. The difeafe being entirely local no medicine proves ufeful but fuch as act directly upon the parts affected.

6. That where the membrane of the urethra is alone affected, no remedy proves fo fuccefsful as aftringent injections*.

7. That thefe injections, in order to act with fafety and advantage, muft be thrown up with much caution, and repeated from fix to eight or ten times a day, at the commencement of the difeafe; lefs frequently as the difcharge leffens, and at laft, in a gradual manner, laid entirely afide.

* Vide Numbers 18 and 19 in the Appendix.

8. But

8. But although injections of this deſcription may be uſed with ſafety in all caſes of Gonorrhœa where the membrane of the urethra only is affected, that they are never employed but with much riſk of doing harm where the inflammation has reached to Cowper's glands, to the proſtate gland, or to the bladder.

9. That the greateſt attention is therefore required in diſtinguiſhing between the different ſtages of Gonorrhœa; the want of this having, with ſome practitioners, brought the uſe of injections into diſcredit, when the fault did not lye in the remedy, but in the improper application of it.

10. That in all ſtates of the diſeaſe, where the inflammation has gone farther than the membrane of the urethra, inſtead of wiſhing to remove the diſcharge, we ſhould rather endeavour to ſolicit a greater flow of it; the running, in ſuch circumſtances, being only a ſecondary object,

when

when compared with the consequences which are apt to ensue from inflammation proceeding to a great height. For the more certain prevention of which, blood-letting, both general and local, are particularly useful on the first approach of such symptoms as indicate an affection, either of the mucous glands of the urethra, the prostate gland, or bladder.

11. That when, notwithstanding of blood-letting, a low regimen, and other parts of an antiphlogistic course, tumours form in Cowper's glands, or in any other parts contiguous to the urethra, and when suppuration occurs in them, the matter should be immediately discharged by an incision of a sufficient size, and the sore treated in the usual way.

12. That in affections of the prostate gland, which do not give way to blood-letting, opium alone is to be depended on for relieving the irritation and distress which ensue from them; the pain being often so severe that no other remedy proves

proves in any degree ufeful. That opium, in thefe cafes, proves always moft effectual when applied directly to the parts affected, in the form of injection; and that extract of hyocyamus may be ufed when it is found that the coftivenefs, which ufually refults from opium, proves hurtful.

13. That when the bladder is affected, opium or hyocyamus are in like manner to be ufed to relieve pain. That uva urfi is the moft effectual remedy for obviating the difcharge of vifcid mucus, the ufual confequence of inflammation of the bladder, and that the thickening of the coats of the bladder, which inflammation, from whatever caufe it arifes, is apt to induce, has in fome cafes been removed by a gentle courfe of mercury.

14. And laftly, it appears, that the leading fymptoms of Gonorrhœa are fo much alike in both fexes, that the general method of treatment is fimilar in both: only that in women, from the fituation and

and organization of the parts affected admitting of it, injections may at all periods of the diseafe be ufed with more freedom than in men; an inflamed ftate of the bladder being, in women, almoft the only circumftance that can take place in Gonorrhœa to render injections improper.

CHAP.

CHAP. III.

Of the Consequences of Gonorrhœa Virulenta.

SECTION I.

General Remarks on the Consequences of Gonorrhœa Virulenta.

ALTHOUGH the treatment pointed out in the preceding sections for the cure of Gonorrhœa will in general prove successful, yet every candid practitioner will admit that it is not always so, and that instances occur of different symptoms proving obstinate, notwithstanding a careful and attentive application of every remedy with which we are acquainted.

The

The caufes of this failure I have already endeavoured to explain. In this part of the work I mean to fpeak of the confequences of Gonorrhœa, fome of which are, in moft inftances, the effect of mifmanagement, while others enfue after the greateft care and attention in the conduct of the cure. They are all, however, of a local nature, and not neceffarily connected with any general difeafe of the conftitution. The following is the order in which I mean to treat of them:

Gleet; feminal weaknefs and impotency; ftrictures in the urethra; abfceffes and fiftulæ in perineo; deranged fenfations in the bladder and urethra; fwelling of the tefticle; fwelling of the epidydimis and fpermatic chord; fwellings of the lymphatic veffels of the penis; fwelling of the glands in the groin; excoriations of the glans and prepuce; phymofis; paraphymofis; warts on the glans, prepuce, and labia pudendi. And, laftly, I fhall add a few obfervations on what may be termed Gonorrhœa

norrhœa Simplex, in which a discharge occurs from the urethra, without any infectious matter being applied to it.

SECTION II.

Of Gleets.

WHEN the discharge in Gonorrhœa continues obstinate, after the symptoms of inflammation are removed, the disease is then termed a gleet.

From this definition we might be led to imagine that the import of the term Gleet would be clearly and generally understood, and that no risk could occur of its being misapplied. This, however, is not the case; for the symptoms which one practitioner considers as Gleet, are by others said to be Gonorrhœa. Some assert that Gleet does not take place till the discharge becomes colourless, and resembles mucus; while

while others are of opinion that Gonorrhœa changes into Gleet before this change of colour is perceptible.

All agree in this, that Gleet does not take place ſo long as the diſcharge is capable of communicating infection; but no preciſe marks have yet been diſcovered by which we can judge of this circumſtance with certainty. When the diſcharge becomes tranſparent and viſcid, like mucus, I believe that no infection will ever enſue from it; but I alſo ſuppoſe that it is often equally harmleſs long before this change has appeared in it. By the uſe of aſtringent injections, demulcents, and cooling purgatives; and, in ſome caſes, by the lapſe of time alone, the running in Gonorrhœa will loſe its colour, acquire a mucous appearance, and even abate in quantity, and yet it will again become yellow, and appear in larger quantities than at firſt. In ſuch circumſtances the diſcharge may be conſidered as altogether deprived of the power of communicating infection; at leaſt no inſtance of the con-

trary has ever occurred to me, and I have reafon to think, that, in every inftance it will be found to prove inoffenfive where the inflammation by which it was at firft induced has been once completely removed, whatever the method of cure may have been by which this was accomplifhed: while, on the contrary, I am convinced, from a variety of facts which might here be enumerated, that fo long as the primary inflammation of Gonorrhœa continues, however long this may be, the matter produced by it is equally capable as at firft of communicating infection. Admitting, therefore, that the running fhould not be denominated Gleet, fo long as it is in any degree infectious, it is evident that this term ought not to be applied to it, till it has become clear and tranfparent, or till the inflammation by which it was at firft induced is removed, and of which we can only be certain by the ceafing of the pain which accompanied the inflammatory ftate of the difeafe. The difcharge in Gonorrhœa frequently difappears altogether,

ther, and the patient confiders himfelf, for the fpace of feveral days, nay, in fome inftances, for weeks, as completely cured; when, either by violent exertion on horfe-back or on foot, by excefs in drinking, or too early connection with women, the running will again take place, with every mark of a new infection. When the patient, however, is confcious of not having expofed himfelf to the rifk of being infected, he may always confider this renovated difcharge as of a harmlefs nature, provided the inflammation and pain by which it was at firft excited had previoufly difappeared. Among other proofs of this, I might mention various inftances of married men, who, from Gonorrhœa contracted in youth, have frequently, during life, from one or other of the caufes I have mentioned, experienced frequent returns of this difcharge, who, in this fituation, have had frequent connection with their wives, without communicating the difeafe. In fome of thefe the difcharge will be abfent for feveral weeks, nay, for

months together; while in others it has not disappeared for more than two or three days at once, during the space of twenty years.

In all of them, upon its first recurrence, it has exactly the appearance of a new infection; but the event soon shews it to be materially different. If astringent injections are employed, they, for the most part, put an immediate stop to the running; and, when left to itself, the matter becomes more quickly colourless than it ever does in a recent case of Gonorrhœa.

In one instance, a gentleman applied to me in a state of the greatest distress, the day after his marriage. He came upwards of twenty miles from the country, with every appearance of a recent clap; which, he assured me, had broke out that very morning, although no appearance of an infection, under which he formerly laboured, had been perceived for upwards of three months, nor had he, during that period, been exposed to the risk of getting a new one. This, in the state of temporary frenzy,

frenzy, under which I found him, led to the diſtreſsful idea of his having been infected during the preceding night, by his newly married wife. I aſſured him that this was impoſſible; for that, independent of the ſurety which he derived from the unblemiſhed character of his wife, no infection could have appeared with ſuch violence in ſuch a ſhort ſpace of time; and on hearing that he formerly laboured under Gleet, I alſo ventured to ſay, that the diſcharge would probably diſappear almoſt as ſuddenly as its approach had been rapid. My prediction proved true. I immediately threw up a vitriolic injection, and cauſed him repeat it three or four times in the courſe of a few hours. By five or ſix o'clock in the afternoon nothing but a ſlight oozing from the urethra was perceptible; I furniſhed him with more of the injection, and he went home perfectly ſatisfied in the evening.

This happened ſeveral years ago, and the ſame appearances have uniformly recurred ſince that period, upon every connection

with his wife, but no infection has ever been communicated to her. For a considerable time he always had recourse to the injection on the running taking place, but at last, being perfectly convinced of its being perfectly harmless, he allowed it to go on; so that for these last three or four years, he has seldom been many days together free of it.

But although patients, from being long accustomed to this discharge, come to find that it does not communicate infection, still they can never look upon it with indifference; they all find it troublesome and distressful, and are therefore, at times, anxious to get free of it. When, at the same time we consider, that a long continued Gleet is apt to lay the foundation of some very obstinate and perplexing affections of the urethra, it will at once appear, that in every instance, this symptom merits our serious attention.

Gleet seems evidently to arise from different causes, requiring different modes of

of treatment: it will therefore be proper to confider them feparately.

1. The moft frequent variety of Gleet fucceeds to the firft ftage of Gonorrhœa, in which we do not fuppofe that the original inflammation proceeded farther than the urethra itfelf, or the fmall mucous glands immediately emptying into it.

When the cure of this variety of Gonorrhœa is interrupted, either by improper treatment, or by negligence on the part of the patient, and when the difcharge is thereby allowed to go on for any unufual length of time, Gleet is thus frequently produced. Aftringent injections will, for the moft part indeed, put a ftop to the running, but the flighteft excefs very commonly excites a return of it.

This variety of the difeafe we conclude to proceed from relaxation and debility in the parts firft affected, and that the obftinacy with which it often continues depends upon a farther degree of weaknefs, induced in thefe parts by the longer con-

tinuance of the running; by which it would appear to have a power, if not counteracted, of continuing or propagating itſelf.

By ſome, this idea of Gleet proceeding in any inſtance from weakneſs, is ridiculed; and as the ſuggeſtion comes from very reſpectable authority I think it right to take notice of it*.

Mr. Hunter obſerves, that by mechanical weakneſs is underſtood the not being able to perform ſome action, or ſuſtain ſome force; by animal weakneſs the ſame; but he cannot underſtand the expreſſion when applied to an animal performing an uncommon, or an additional action, as ſeems from the quantity of matter diſcharged, to happen in Gleet.

This opinion appears to be founded upon the idea of an increaſed diſcharge being always the conſequence of an increaſed action in the veſſels of the part from whence it proceeds; and it originates from

* Vide Treatiſe on the Venereal Diſeaſe, by John Hunter, p. 100.

his

his not discriminating between general debility and local relaxation, or loss of tone in a particular part.

Although an increased discharge in the vessels of any part would seem to imply an increased action in these vessels, yet the reverse of this will, I believe, in most instances, be found to happen; and that affections of this nature proceed chiefly, if not entirely, from local debility. Loss of tone in the exhalents will necessarily produce a more copious discharge of their contents than will probably happen while their power of retention remains entire. Were these vessels unconnected with the rest of the system this would not take place; but connected as they are with the arterial system, while the vis a tergo remains the same, any partial debility to which they may be liable, must, perhaps universally, be attended with a preternatural effusion of their contents.

There is much reason to suppose, from the phenomena which occur in inflammation, that an increased action takes place in

in the veſſels of the part affected: but during the exiſtence of this increaſe of tone, we commonly find that, in Gonorrhœa, the diſcharge is not ſo conſiderable as it afterwards becomes when the ſymptoms of inflammation abate. Nay, it is univerſally known that the running is apt to ſtop entirely when the parts affected inflame to a greater degree than uſual, and that nothing ſo readily ſolicits a return of it as the removal of this inflammation, by the uſe of emollient injections.

This is an argument of ſome importance in favour of our opinion, and it is farther confirmed by the nature of all the remedies which we employ in Gleet, which are either of an aſtringent, ſtrengthening kind, or conſiſt of ſtimulating injections, and other applications of a ſimilar nature, which ſeem to act by exciting an encreaſed exertion in the veſſels of the affected parts, by which they are enabled to reſiſt the action of the arterial ſyſtem from behind.

I there-

I therefore conſider it as clear and decided that this variety of Gleet proceeds from relaxation and debility of the exhalents of the urethra, and, perhaps, of the excretory ducts of the ſmaller mucous glands of that paſſage.

This opinion of Gleet being connected with debility, may indeed be carried too far, as happens, I believe, daily in common practice. Where Gleet has run on for any length of time, many think that it has either at firſt proceeded in a great meaſure from general weakneſs of the conſtitution, or that it has tended to excite ſuch a general degree of debility as will effectually obſtruct every attempt towards a cure, till this ſtate of the ſyſtem be removed.

Hence the patients are with much care and anxiety enjoined the uſe of bark, ſteel, and other tonics, with a view to remove the general debility; while leſs attention is uſually given to the real cauſe of the diſeaſe, the local relaxation of the parts originally affected.

That

That general weakneſs often takes place in Gleet, and that it may even be induced by a long continuance of the diſcharge, will not be denied; but I have much reaſon to think, that in practice, this idea is often carried farther than it ought to be. This muſt neceſſarily be the caſe whenever it makes us loſe ſight, as I have obſerved above, of the real origin of the diſeaſe; but there is alſo cauſe to imagine, that in giving additional vigour to the ſyſtem at large, we tend to encreaſe the diſcharge by the urethra, unleſs the tone of the parts which have been more particularly weakened be at the ſame time reſtored. The reaſon of this has been explained above, and I have often had evident proofs of the hurtful tendency of the practice; by which, while the patient, from the effects of ſea-bathing, a full diet, and the uſe of tonics, was daily getting more full in fleſh than he was before, the diſeaſe has evidently been gaining ground, from no particular attention being given

to

to the ſtate of the parts from whence the running proceeds.

In a ſtate of univerſal debility, whether induced by a long continuance of the diſcharge, or any other cauſe, the greateſt attention ought certainly to be given to it; but what I wiſh to inculcate is, that in common practice we rather do harm by conſidering this general relaxation of the ſyſtem as the firſt object of attention, when, in fact, it often either does not take place at all, or only in ſuch a degree as to render it a matter of very trifling importance, when compared with the diſeaſe in the urethra.

In a great proportion of caſes of this variety of Gleet, our attention ſhould be almoſt entirely directed to this affection of the urethra; and by experience we find that ſuch remedies are chiefly to be depended on as act directly upon the ſeat of the diſeaſe.

A variety of medicines have been employed for this purpoſe, but they may all be

be comprehended under the two general heads of aſtringents and ſtimulants; for all that have yet been found uſeful in Gleet ſeem either to act by their aſtringent properties, or by their power of ſtimulating the parts to which they are applied.

When aſtringent injections have not been already employed, they ought, in the firſt place, to get a full trial; for although they do not always prove ſucceſsful, yet they frequently do ſo, and we ſeldom or never find that any riſk enſues from them, as ſometimes does from ſtimulating injections.

Any of the aſtringent ſolutions for which preſcriptions are given in the Appendix, may be employed; but the vitriolic ſolution, No. 18, is one of the ſafeſt, and very commonly proves the moſt effectual. In the uſe of all injections of the aſtringent kind it is neceſſary to throw them frequently up, not leſs than ſix or eight times a day. This was particularly inculcated in the uſe of injections in Gonorrhœa,

norrhœa, and it proves equally proper in this variety of Gleet.

But where aſtringent injections have already been employed for the cure of the preceding Gonorrhœa, and where there is no doubt of a complete trial having been given them, in ſuch circumſtances, as there would be no cauſe to expect advantage from a farther uſe of them, they ought to be laid aſide.

In that ſtate of the diſeaſe where a plentiful diſcharge takes place, with little or no pain, and where aſtringents have been employed with no advantage, ſtimulating applications become particularly proper.

The ſtimulants we employ are of two kinds; acrid ſolutions and mixtures in the form of injections, and bougies. Which ever of them are uſed muſt be of ſuch a nature as to ſtimulate the parts gently to which they are applied, but not ſo ſtrong as to excite inflammation in any conſiderable degree. They prove moſt ſucceſsful where they give only a moderate degree of pain and heat in the urethra; ſuch as is

is felt in the commencement of the firſt ſtage of Gonorrhœa. Inſtances, indeed, often occur of a newly contracted clap carrying off a Gleet that has been of long duration; and as this is always productive of ſome degree of inflammation, we conclude that the remedies employed in Gleet muſt act in a ſimilar manner, viz. by gently ſtimulating and exciting the parts to inflame in ſuch a degree as experience ſhews to prove uſeful. To excite violent pain would at all times be improper, as the inflammation which this would produce might go farther than we would incline it to do. Much harm, indeed, has been done by want of attention to this circumſtance. A ſwelled teſticle is not an uncommon effect of it; and I have known the inflammation carried to the proſtate gland and bladder.

This, however, may always be prevented; nor can it ever occur but from great inattention. Wherever injections are uſed, they ſhould at firſt be ſo weak as to excite only a very ſlight degree of uneaſineſs.

In

In the formulæ annexed to this they are of ſuch a ſtrength as to act in this manner in a great proportion of people, although, in ſome inſtances, I have found them rather weaker than neceſſary. An addition of ſtrength, however, is ſo eaſily given, that at firſt they ought never to be ſtronger.

One of the beſt injections for ordinary uſe is a weak ſolution of corroſive ſublimate in water *. That is, in the proportion of an eight part of a grain of the mercury to an ounce of water, which is as ſtrong as it ought ever to be uſed at firſt; although I have met with ſome, who, in a gradual manner, have been brought to bear half a grain to an ounce. I know that ſome have adviſed it of a ſtill greater ſtrength, even to the extent of a grain of mercury to the ounce of water; but although I am in the daily practice of uſing this remedy, I never found any perſon who could bear it of this ſtrength. I therefore ſuſpect that thoſe who adviſed it have never known it uſed.

* Vide Appendix, No. 24.

I have taken the more particular notice of this, from ſeveral inſtances having fallen within my own obſervation, of very pernicious conſequences enſuing from the uſe of injections containing too great a proportion of mercury, while no inconveniency ariſes from them when not ſtronger than thoſe I have pointed out.

In ſome caſes, where a ſolution of corroſive ſublimate by itſelf has failed, I have known the addition of ſaccharum ſaturni prove uſeful *; and in ſome very irritable patients, in whom even the ſmalleſt quantity of the mercury excited too much pain, an addition of mucilage has enabled them to bear it. Of this a formula is given in the Appendix †.

A ſolution of crude ſal ammoniac ‡ proves ſometimes effectual in this ſtate of Gleet. The volatile alkali, ſuch as ſpirtus corn. cervi, and ſpiritus ſalis ammoniaci, properly diluted, make likewiſe uſe-

* Vide Appendix, No. 25. † No. 26.
‡ Appendix, No. 27.

ful

ful injections for this purpose, as in formulæ No. 28 and 29; and verdigrise, dissolved either in oil, or in spirit of sal-ammoniac, afford also a very effectual form of injection for the same purpose: formulæ of these last are given in Nos. 30 and 31.; and in some instances tincture of cantharides, properly diluted, as in No. 32, has been found to answer.

Besides the circumstance of ascertaining the proper strength of these injections, a good deal of address is required in the application of them. They must not be employed either so long or so frequently as is required for astringent injections; with these no harm can occur, however frequently they may be applied; but injections of a stimulating nature should not be continued longer than is just necessary for exciting some degree of pain and inflammation in the affected parts.

This being accomplished, a few days should elapse before any other remedy is employed; for it sometimes happens that the running will stop after these stimulat-

ing injections are laid aside, although, during the use of them, it appeared to be increased. But when, after an interval of three or four days, this does not appear likely to happen, injections of an astringent kind should be immediately employed, as we have already advised in the first stage of Gonorrhœa.

Even these will not always succeed; for it sometimes happens that the running, although it may disappear for a few days, will yet return again and again, with equal violence as at first.

In such circumstances, the stimulating injections must be again renewed, and the inflammation ought now to be excited in a degree somewhat greater than before; for I have commonly found that this may be done with more safety in the subsequent applications of this remedy; and in the more advanced stages of Gleet the higher the degree of inflammation that can with safety be excited, the greater certainty there is of its proving effectual.

When

When injections do not accomplish a cure, we endeavour to effect our purpose by the use of bougies. By irritating the urethra, bougies answer the same purpose with stimulating injections; and, in some instances, they have appeared to prove more effectual, perhaps from the support which they afford to the parts which have been deprived of their tone. This, however, does not happen with any kind of certainty, insomuch that I always give the preference to injections in the first instance, as being less formidable in the application to all such patients as have not been accustomed to the use of bougies.

Bougies composed of the most simple materials, commonly answer all that we expect from this kind of remedy; but when these fail in exciting a sufficient degree of inflammation, they are easily rendered more active by dipping them in oil of turpentine, in a thin liniment of wax and oil with a small proportion of red precipitate, or in common basilicon re-

duced with oil of turpentine, to the confiſtence of a liniment.

I have no reaſon to think that mercurials act in the cure of Gleet in any reſpect as ſpecifics; but the ſtimulus which mercurial ointment gives to the urethra, when applied upon bougies, proves often as effectual as that from any medicine which we employ. It is proper, however, to obſerve, that the ointment for this purpoſe ought to be ſtrongly impregnated with mercury: there ſhould not be leſs than equal parts of quickſilver and hog's-lard; and I have ſometimes thought that mercury, extinguiſhed by triturating with honey, acts more certainly as a ſtimulant than it uſually does in the form of an ointment.

If the conſtitution has been much debilitated, we ought, while this application of remedies to the diſeaſed parts is going on, to adviſe a nouriſhing, invigorating diet. The patient ſhould be allowed animal food, and a moderate portion of red wine daily; and in ſuch circumſtan-

ces

ces bark may with propriety be exhibited as a tonic: but for the reaſons I have given above, I have much cauſe to think that the general practice of giving bark, ſteel, and other tonics, in every caſe of this kind, is by no means well founded, and in many inſtances that it does harm.

Some of the ſtimulating aſtringent balſams, given internally, frequently prove uſeful here; probably from their tendency to ſtimulate in a more particular manner the organs of urine than any other part of the body. Balſamum copaiba is chiefly uſed for this purpoſe, but Canada balſam, and all the turpentines, may be employed with perhaps equal advantage. Fifteen or twenty drops of any of theſe may be given three or four times a day.

A cautious uſe of cantharides has alſo proved ſerviceable in this variety of Gleet. Ten drops of the tincture may be given two or three times a day.

But although ſome advantage may be derived from all of theſe remedies, when employed along with local ſtimulants, as

we have advifed above, yet no dependence is to be placed upon them when they are not conjoined with thefe. This, it may be faid, renders the advantages to be expected from them doubtful and equivocal; but in different cafes I think I have perceived greater advantages from a combination of thefe two fets of remedies, than ufually occurs from a feparate ufe of either of them.

Cold bathing is a remedy commonly advifed in Gleets, and where the conftitution is fo much debilitated as to require attention, it will very generally anfwer a good purpofe; otherwife no advantage can probably accrue from it, if it be not from the local application of cold to the parts chiefly affected. In this view, the daily effufion of cold water upon the penis, and the bathing of the perineum, proves fometimes ufeful.

2. The next moft frequent variety of Gleet fucceeds to the fecond ftage of Gonorrhœa. After all the fymptoms excited by the actual prefence of inflammation have

have ſubſided, this variety of the diſeaſe is very apt to terminate in Gleet.

In the third ſection of the laſt chapter I endeavoured to ſhew, that in this ſtage of Gonorrhœa, Cowper's glands are chiefly affected, and that they afford a great proportion of all the matter that is diſcharged. Any inflammation which occurs along with this in the membrane of the urethra, is, for the moſt part, eaſily removed, ſo that the Gleet, which often ſucceeds, proceeds either altogether, or nearly ſo, from the cavities of theſe glands.

Gleet, proceeding from this cauſe, is, for the moſt part, eaſily diſtinguiſhed from that which we have deſcribed as the firſt or moſt frequent variety of the diſeaſe. In this laſt the matter uſually proceeds from within an inch, or little more, of the glans, or when parts farther back are affected, the diſcharge is forced off from them by very gentle preſſure upon the perineum: but, in the other, the matter is, in every inſtance, found to proceed from the upper part of the urethra; a greater degree of preſ-

preſſure upon the perineum is neceſſary to force it out; and ſome degree of fulneſs, accompanied with irritation, and even pain, is experienced on the perineum being preſſed upon for this purpoſe.

We are alſo aſſiſted in the diagnoſis by the hiſtory of the preceding Gonorrhœa; for it will be uniformly found that the firſt variety of Gleet has ſucceeded to the firſt ſtage of Gonorrhœa, and that the ſecond ſtage of Gonorrhœa has given riſe to that which we are now conſidering.

In the treatment of Gleet it is of importance to have this difference aſcertained, for the remedies which commonly accompliſh a cure in the one, are uſed in the other either without any advantage whatever, or even with evident proofs of doing harm. Thus, although in the firſt variety of Gleet we depend ſo much upon ſtimulating injections, that a cure in moſt inſtances cannot be accompliſhed without them; in the other, where the larger glands of the urethra are affected, they very commonly render every ſymptom worſe

worse than it was before. They at least do so where the injection is of such a strength as to excite pain and inflammation; and if weaker than this, it may be used for an indefinite length of time, without any effect resulting from it. The glands opening into the urethra being here the seat of the disease, astringent injections, applied as we have elsewhere observed, to their excretory ducts, may produce a temporary stoppage of the discharge; but, as they do not reach the cavities of the glands, no permanent advantage can be expected from them. While, again, when an injection is used of such a strength as to excite inflammation upon the ends of these ducts, it is very apt to produce swellings in the glands themselves, which at last commonly terminate in suppuration, to the great distress and disappointment both of the patient and practitioner.

Whenever it is therefore discovered with certainty, that this variety of Gleet exists, injections should be no longer employed;

ployed; or when, for the ſatisfaction of the patient, a farther trial of this remedy becomes neceſſary, ſuch preparations only ſhould be uſed as are moderately aſtringent.

In ſuch circumſtances bougies, and bliſters to the perineum, are the moſt effectual remedies I have ever employed. The bougies ſhould be of the mildeſt kind, ſuch as ſtimulate the parts gently, without exciting inflammation. By this, and by the ſupport which their ſize and form afford to the weakened parts, they often prove highly ſerviceable; and even when they do prove more powerfully ſtimulating than we may have wiſhed or expected, they do not ſo readily do harm as injections; for the inflammation with which this may be attended is always accompanied with an inſtantaneous diſcharge of matter, by which the inconvenience that otherwiſe might reſult from them is very effectually prevented.

Bougies ought, for every purpoſe, to be as large as the capacity of the urethra will admit;

admit; but their being of a full ſize is more particularly neceſſary in this variety of Gleet than for any other malady; for it is chiefly by their ſize that they prove uſeful here.

In moſt inſtances of this kind it appears, in the courſe of a few days, whether bougies are to be of ſervice or not; but no permanent advantage is ever to be expected from them if they are not continued for a conſiderable time. When the diſeaſe has been of long duration, the bougies ought to be applied for the ſpace of ten or twelve weeks, and not even deſiſted from then if the cure be not compleated. It is proper, however, to obſerve, that after bougies have been uſed for ſuch a length of time as ought to accompliſh a cure, they ſhould from time to time be laid aſide, that the effects produced by them may be diſcovered; for while they are daily introduced we can never know with certainty whether any diſcharge which takes place is the effect of the diſeaſe, or of the irritation which they excite; as bou-

gies

gies can never be applied for any length of time together, not even to a ſound urethra, without being found covered with matter, or with mucus in the form of matter, on their being withdrawn.

When bougies fail, a bliſter applied over the whole perineum ſometimes proves ſerviceable. Whether it is by the ſtimulus which they give to the parts affected, or by they diſcharge which they excite, is uncertain; for in ſome an evident advantage enſues upon the firſt or ſecond day from their application, and before any quantity of diſcharge can have occurred, while in others no effect is obſerved to reſult from them till the ſecond, third, or perhaps, fourth bliſter has been applied. In a few inſtances, ſome advantage has appeared to be derived from a ſmall portion of the bliſtered part being kept open with epiſpaſtic ointment, which, in two caſes of much obſtinacy, led me to adviſe the introduction of a ſmall ſeton on one ſide of the perineum; but although this ſeemed likewiſe to leſſen the diſcharge, the advantage

tage derived from it was neither ſo great nor ſo obvious as to compenſate the very diſagreeable nature of the remedy.

In very obſtinate caſes of this variety of Gleet, the patient will frequently be found to be of a ſcrophulous conſtitution. If the diſeaſe has not already appeared in a more evident manner in other parts of the body, it will at leaſt often happen that the glands of the neck, and other ſuſpicious parts, will appear to be tumefied, and that the complexion of the patient, which is commonly delicate, gives much cauſe to conclude that the ſyſtem is not free of it.

In ſuch circumſtances, all the remedies uſually employed in ſcrophula will, from time to time, be adviſed. Bark and hemlock have ſometimes proved uſeful here; but no remedy that has yet been employed in ſcrophula is in any degree equal to ſea-bathing.

In enumerating the different varieties of Gleet, I have proceeded in the order in which they moſt frequently appear. The

next

next of which I ſhall take notice proceeds from ſtrictures in the urethra.

In an enſuing ſection I ſhall find it neceſſary to enter more minutely upon the conſideration of venereal ſtrictures in the urethra: at preſent, therefore, it ſeems only requiſite to ſay, that they are to be conſidered as a very frequent cauſe of Gleet. The ſpongy ſurface of the ſubſtance from which theſe ſtrictures are produced is very apt to become tender and excoriated. A ſlight degree of ulceration thus takes place, which continues to give out matter while any degree of the ſtricture remains, and where the extent of the diſeaſe is conſiderable, this of itſelf would afford a very copious diſcharge; but beſides this, the remora which every ſtricture produces, of urine and mucus between the part on which it is ſeated and the bladder, acts as a very powerful cauſe of irritation, and in this manner renders the diſcharge more abundant than we almoſt ever find it to be in Gleet, proceeding from any other cauſe.

Where

Where ſtrictures are not ſuſpected as the cauſe of the diſcharge, as often happens where the obſtruction to the flow of urine is not remarkably great, the patient as well as the ſurgeon is apt to be deceived, and to proceed daily with the plan of effecting a cure by injections, balſam of copaiba, and other aſtringents. None of theſe remedies, however, have any influence, and the diſcharge, after many years continuance, is found to be nearly in the ſame ſtate, either as bad, or perhaps worſe, than at firſt. Of this every practitioner muſt have met with inſtances, and they always prove the ſource of much perplexity and embarraſſment.

In every caſe, therefore, where Gleet reſiſts the uſual remedies, and is thus particularly obſtinate, it ought to be our firſt object to aſcertain the real ſtate of the urethra, and to learn whether ſtrictures are preſent in it or not. In ſome caſes this will at once be known from the ſtate of the ſymptoms obtained from the patient, as well as from external examination of

the urethra from the point of the penis to the fundament. This, however, will only happen in the more ſevere degrees of the diſeaſe. Where the obſtruction is ſlight, it may, as we have already obſerved, paſs unnoticed; ſo that in all ſuch circumſtances, and where there is any cauſe for doubt, the paſſage ſhould be examined with a bougie, by which alone any certainty upon this point can be obtained.

When the exiſtence of ſtricture is diſcovered, all other remedies ought at once to be laid aſide, and the cure truſted entirely to bougies. Hereafter we ſhall have occaſion to ſpeak more particularly of bougies; at preſent we need only ſay, that they are the only remedy upon which we can depend for the removal of ſtrictures, and that they very commonly prove effectual when duly perſiſted in.

When the diſcharge proceeds entirely from ſtrictures, it will, for the moſt part, ſoon ſubſide on theſe being removed; but when it continues more than a few days after the bougies are withdrawn, it will

be proper to employ aſtringent injections in order to carry it off. Lime-water anſwers well: for this particular purpoſe, indeed, it anſwers better than any other form of injection I have tried, but it requires to be diluted with an equal quantity of common water.

4. The laſt variety of Gleet of which we have to take notice proceeds from a ſwelled ſtate of the proſtate gland, and ſucceeds, as we have already had occaſion to ſee, to the third ſtage of Gonorrhœa Virulenta.

In treating of Gonorrhœa the ſymptoms were enumerated by which affections of the proſtate gland may be diſcovered; but we have no certain means of knowing to what extent it may be ſwelled but by examination with the finger in ano.

Beſides the inconveniency which occurs here from the diſcharge itſelf, and which is common to this with every variety of Gleet, there is always a good deal of uneaſineſs, and even pain, produced by the

ſwelling of this gland, which excites a more frequent deſire to paſs water than any other variety of the diſeaſe, together with a ſenſation of heat and fulneſs over the whole parts contiguous to the anus. The teneſmus which often takes place is alſo a very troubleſome ſymptom.

Gleet, proceeding from this cauſe, is ſometimes combined with other varieties of the diſeaſe, particularly with that which was laſt deſcribed. In this caſe the diſcharge has moſt frequently the appearance of being a mixture of pus and mucus ; but when the running proceeds entirely from an affection of the proſtate gland, it is thinner than purulent matter, and, although ſometimes tinged of a white or yellow colour, it is more frequently of the conſiſtence and colour of mucus. This makes it often be miſtaken for a diſcharge of ſemen.

No injections are of any utility in this variety of Gleet ; nor is any advantage derived from bougies. On the contrary, they are both apt to do harm, particularly

a perſeverance in the uſe of them; a practice which thoſe not accuſtomed to this branch of buſineſs are very apt to fall into. Swellings of this gland are very commonly attended with ſome degree of obſtruction to the paſſage of urine, and when this is miſtaken for ſtrictures, as often happens, bougies are immediately adviſed in order to remove it.

Bougies, however, never prove uſeful here: on the contrary, they very commonly irritate the gland to ſuch a degree, as to excite both an increaſe of the pain and of the diſcharge.

Opiates are the remedies upon which we place moſt dependence. By allaying irritation, they not only keep the patient free from pain, but in doing ſo they tend more than any other remedy to leſſen the diſcharge. It muſt, however, be acknowledged, that they act chiefly as palliatives; but the mere prevention of pain is a point of no ſmall importance in a diſeaſe which otherwiſe is apt to render the patient miſerable. In ſpeaking of affections of this

gland in the third ſtage of Gonorrhœa, I adviſed opiates to be uſed in clyſters, inſtead of being taken by the mouth. They do not, in this form, ſo readily induce ſickneſs, and they uſually prove more effectual in relieving pain.

In ſeveral inſtances, where no great advantage was derived from all the quantity of laudanum that durſt be given by the mouth, patients have been kept eaſy by a grain or two of opium diſſolved in a ſmall quantity of mucilage, and thrown, from time to time, into the rectum.

Where this diſeaſe occurs in ſcrophulous conſtitutions, an occurrence by no means uncommon, hyocyamus, cicuta, and ſea-bathing, are the remedies uſually employed; and although they do not often accompliſh a cure where the gland is much ſwelled, yet they frequently afford relief; and ſlighter degrees of the diſeaſe have, in ſome inſtances, been removed by them entirely.

Some practitioners, as I have already had occaſion to remark, give mercury in every

every variety of Gleet, but I have never known any advantage derived from it, and where the proſtate gland is affected it very commonly does harm.

As I have mentioned above, that in Gleet proceeding from ſtrictures in the urethra, ſome ſlight degree of ulceration takes place, it may be imagined that mercury ought in ſuch inſtances to prove uſeful, from its well known powers of healing venereal ulcers. It is not, however, found to promote the cure of theſe ulcerations; a circumſtance that may be conſidered as a farther proof of the difference between Gonorrhœa Virulenta and Lues Venerea; for if affections of this kind were induced by the matter of Lues Venerea, mercury would ſeldom fail in curing them, while no other remedy would ever prove ſucceſsful. But, inſtead of this, I have repeatedly found, that no advantage is derived from mercury in the treatment of this ſymptom, while bougies, when properly managed, very commonly prove effectual.

What we have hitherto ſaid upon the ſubject of Gleet relates chiefly to the diſeaſe as it occurs in men, it being in them both more frequent, and of much more difficult treatment than it uſually is in women.

We often meet with it, however, in women; but it is proper to remark, that it is equally difficult to diſtinguiſh it from fluor albus, as in a former ſection we have obſerved Gonorrhœa to be. Referring to what was then ſaid upon the means of diſtinguiſhing between the two diſeaſes, we ſhall at preſent proceed ſhortly to obſerve, that in women we depend entirely for the cure of Gleet upon a proper perſeverance in the uſe of injections. When after a due continuance of ſuch as we reckon aſtringent *, if the diſcharge ſtill continues, thoſe of a ſtimulating nature ſhould be employed, particularly Nos. 24 and 25.

When the diſeaſe is ſeated in the vagina, as is generally the caſe, theſe injections

* Vide Appendix, Nos. 18, 19, and 20.

may

may be thrown up with freedom; but when the discharge proceeds from the urethra they ought, on account of the contiguity of the bladder, as we had occasion to remark in a former section, to be thrown up with much caution.

In women I have sometimes found that a Gleet has proceeded from ulceration within the verge of the vagina. In such instances injections have little or no influence; and as sores of this kind are commonly connected with Lues Venerea, they can only be cured by a course of mercury.

It is proper, however, to remark, that women are liable, as men are, to excoriations from the acrimonious nature of the matter of Gonorrhœa. A discharge of matter from this cause will be most readily cured by astringent injections, or bathing the parts with lime-water, or a saturnine solution.

I have never known the real venereal stricture occur in women. Excressences form in the urethra from other causes; but

but ſtricture from Gonorrhœa muſt neceſſarily, in this ſex, be a rare occurrence. If it is ever met with, bougies muſt here, as in men, be depended upon for a cure.

SECTION III.

Of Impotency from Seminal Weakneſs.

WE here mean by impotency a deprivation of the power of propagating the ſpecies.

This may proceed from various cauſes; but it is that variety of it only which is uſually ſuppoſed to ariſe from weakneſs in the ſeminal veſſels that we are now to conſider.

It is an occurrence which, in young people, either in idea or reality, takes place daily; and as it proves at all times a ſource of much anxiety and diſtreſs, it neceſſarily

rily becomes a frequent object of attention to practitioners. A degree of debility inducing want of retention in the ſeminal veſſels is, no doubt, occaſionally met with; but the ſtrong deſire which Nature has wiſely implanted in all men to be complete and entire, in whatever relates to the propagation of his ſpecies, is often, in early youth, the cauſe of much ill-founded ſuſpicion on this point, and of circumſtances reſpecting it being conſidered as real which never took place.

Thus there is nothing more common than young people ſuppoſing they are weak and debilitated, on perceiving an oozing of mucus from the urethra, or a diſcharge of ſemen when at ſtool. The firſt, however, is natural to many when in full health, and where no ſuſpicion of weakneſs exiſts; and the latter, or a diſcharge of ſemen, muſt at all times be the conſequence of hardened fœces compreſſing the veſiculæ ſeminales, when theſe veſſels are full of ſemen. But ſuſpicion on this point being once awake, it is often difficult,

difficult, and ſometimes impoſſible, to remove it; inſomuch that many have been rendered miſerable by this alone, where no veſtige of diſeaſe exiſted.

It is conſidered as one of the moſt certain proofs of weakneſs in the ſeminal veſſels when a diſcharge of ſemen inſtantly ſucceeds to an erection, or, perhaps, to an imperfect degree of it. But this may alſo happen from a ſtate of over-excitement in the other parts of generation, and I alſo believe that it often occurs from the ſeminal fluid being collected in too great quantity in the viſiculæ ſeminales. I have reaſon indeed to imagine, as will appear in the ſequel, that this is the moſt frequent cauſe of all ſuch affections.

It may be ſaid, if the diſeaſe exiſts, and the patient is rendered completely impotent, that the cauſe of his being ſo is a point of little importance. It will appear, however, that this is by no means the caſe; for while real impotency is in a great proportion of caſes to be conſidered as incurable, we have it in our power, perhaps, in moſt in-

inftances of approach to this ftate, to accomplifh a cure.

In the laft fection we have feen that Gleet proceeds at one time from an affection of the glands in other parts of the urethra, but in fome cafes that it arifes from a fwelling of the proftate gland. When this exifts for any length of time, we find that not only the duct of the proftate gland becomes weak and relaxed, but that a lofs of tone takes place in fome of the contiguous parts, particularly in the excretory ducts of the veficulæ feminales; infomuch that a great proportion of all who have long laboured under Gleet from affections of this gland, have likewife been liable, in fome degree, to feminal weaknefs. It is well known that long continued Gleets are often the caufe of Impotency. For the moft part, it is fuppofed, that this happens from the general debility which they induce. In fome inftances this may be the cafe; but I have much reafon to think that they act much more frequently by inducing a local weaknefs only

only in the parts deſtined for the reception of the ſemen. This I conclude to be the caſe from this kind of debility taking place where there is no appearance whatever of general weakneſs, for inſtances often occur in conſtitutions apparently firm and healthy, of ſuch degrees of weakneſs in the ſeminal organs, that emiſſions take place, not merely from partial erections and laſcivious ideas, but from the ordinary friction applied to the penis in riding and walking, and, in ſome inſtances, from the effect of heat alone, whether excited by wine, exerciſe, or ſitting near a fire.

In people who have ſuffered much from frequent returns of Gonorrhœa, particularly where Gleet has taken place from the cauſe I have mentioned, I have known ſeveral inſtances of the ſemen running off by the ſlighteſt application of any of the cauſes juſt enumerated.

The local weakneſs thus induced in theſe parts by Gleet ſeems very much to reſemble the effects of Onaniſm; a habit ſo baneful to many of our youth, that I believe

believe it to be more destructive in its consequences than a great proportion of all the diseases to which in early life they are liable. Were it to prove hurtful to those only whose self-indulgence gives rise to it, there would be less cause to regret the effects of it; but, besides rendering the parent himself miserable, it evidently entails the highest distress upon posterity, by generating languor, debility, and disease, instead of that strength of constitution, without which there can be no enjoyment.

Some, I know, have entertained a different opinion upon this point, and imagine that no bad effects are to be dreaded from the habit of which we are now speaking *. But this is so directly contrary to the experience of others, and I have had so many instances in the course of my own practice of constitutions being irretrievably ruined by indulgence in it, that I cannot avoid, in the strongest manner,

* Vide Treatise on the Venereal Disease, by John Hunter, chap. xii.

giving my opinion of it: nor does it appear that any benefit could reſult to ſociety from a contrary opinion being admitted, even allowing it to be well founded; for although no immediate harm might enſue from it to the conſtitution, it ought to be diſcouraged as unnatural, and from its tending to divert the attention from an enjoyment of a much ſuperior kind. While, therefore, there is much cauſe to conſider the practice as highly dangerous to all who follow it, and while ſuch a propenſity prevails towards it in that early age when boys cannot form a judgment of its deleterious tendency, I conſider it as incumbent on thoſe who write upon it to paint it and the baneful effects which reſult from it in their true and proper colours.

In the treatment of this variety of Impotency, whether it has been induced by Onaniſm, or whether it be the conſequence of Gleet, it is proper to diſtinguiſh it into two ſtages. The one, ſo far as I have ſeen, being of a nature that does not admit of any certain remedy, while the other

may,

may, in moſt inſtances, be completely cured. Many conſider it ſo certainly as incurable that the patient is led to deſpair from the firſt approach of it, and the opinion is often unfortunately realized merely from the cauſe I have mentioned, our not diſtinguiſhing the two ſtages of the diſeaſe, and allowing that which I ſuppoſe may be eaſily removed, to proceed without any attempt for this purpoſe, to that ſtate of it, which, in moſt inſtances, may be conſidered as incurable.

Practitioners are frequently applied to by young men labouring under what I ſhall term the firſt ſtage of Gleet; who, finding that a ſeminal diſcharge takes place from the ſlighteſt cauſes, perhaps merely from their being in company with women; from laſcivious dreams; or from the parts of generation being in any degree overheated, begin to be afraid that they ſhall never again have the power of retention, and conclude therefore that they cannot with propriety enter into a matrimonial connection. We often find that they ad-

mit Onanifm to have been the primary caufe of their diftrefs, although, for a great length of time, perhaps for a number of years, they affert, and with no reafon on our part to doubt them, that they have been entirely out of the practice of it.

In this fituation, whatever may be the appearance and habit of body of the patient, ftrengthening aftringent remedies are prefcribed, fuch as bark, fteel, balfam of copaiba, cold bathing, &c.; and whatever are his views, he is advifed to avoid matrimony and all venereal intercourfes.

In a great proportion of cafes, however, I am convinced that this practice and this advice are erroneous. Following the bulk of practitioners, I eafily adopted them; but no good refulting from them I have long fince relinquifhed them, and I have feldom failed of fuccefs by advifing meafures of an oppofite nature.

In a great proportion of all that are injured by this deftructive habit, a morbid irritability of the organs of generation feems to be excited. By this a greater quan-

quantity of the seminal fluid is secreted than the vesiculæ seminales can retain: in consequence of which, it either bursts out during nocturnal dreams, or is easily excited to flow by the application of any of the causes above-mentioned.

Even after the habit has been long left off I have known the effects of it continue in a very distressful degree, and I conclude that they proceed chiefly from too plentiful a secretion of semen, from the nature of the remedy which in most instances has proved successful.

Instead of advising abstinence from women, I always inculcate as frequent connection as natural desires seem to require; and when matrimony is in view, instead of being afraid of it, as often happens with this class of patients, from a fear of their not performing the functions of it properly, I uniformly hold it forth as the most certain remedy.

The idea of inability is so strongly prevalent with many, that they are with difficulty prevailed upon to make the attempt;

tempt; but the effects of it are ſo certain, that with patients in ſuch circumſtances as we are now conſidering, it may always be adviſed with the greateſt confidence of ſucceſs. Nor is the aſſiſtance of other remedies required in this plan of cure; at leaſt in various inſtances, patients, who, for many years together had been almoſt conſtantly taking ſuch remedies as they judged to be of an invigorating nature, without any advantage reſulting from them, and who therefore were induced to conſider their complaints as incurable, have, on laying all of theſe aſide, become completely and entirely well in the ſpace of a few weeks after marriage. The irritability of the organs was thus diminiſhed; the morbid increaſe of the ſecretion was removed; and the ſeminal receptacles, not being over diſtended, were ſoon found to be endowed with a ſufficient degree of retention.

This being a very frequent variety of the diſeaſe, I can ſpeak of it, and of the remedies employed in it, with ſome degree of

of certainty; and I can with confidence ſay, that none of thoſe commonly adviſed have ever, in the courſe of my obſervation, had any obvious influence; while the plan I have pointed out very generally ſurpaſſes in its effects all that the patient could hope from it.

When a ſwelled ſtate of the proſtate gland is connected, as I have ſometimes found, with this variety of the diſeaſe, it neceſſarily renders the event more doubtful, and the effect, even of this and every other remedy, more uncertain. But even here the courſe I have adviſed will ſometimes prove ſucceſsful. It will not remove any affection of the gland, but where the diſeaſe of that organ is not in a great degree, it proves equally effectual in removing the other, as if the gland was entirely ſound; and this obviates one of the greateſt ſources of miſery to the patient.

It may be ſaid that while this, or any other variety of Gleet exiſts, the remedy I have pointed out cannot with any propriety be adviſed, from the riſk of communi-

municating infection. We know, however, that real Gleet does not communicate infection to others; and the means of diſtinguiſhing it from Gonorrhœa are by no means equivocal. Many inſtances have fallen within my own obſervation, and others muſt often meet with it, of this being clearly the caſe. I know, at this time, ſeveral inſtances of men who have been married for many years, who, during the whole period, have laboured under different varieties of Gleet, and who have never communicated the diſeaſe either to their wives or children. Gleet in men ſeems to be equally uncapable with fluor albus in women to communicate infection.

In that ſtage of the diſeaſe which we have juſt been conſidering, a cure, we obſerve, may, perhaps, in every inſtance, be accompliſhed. But when it has been of ſuch duration as to form what may more properly be termed ſeminal weakneſs, and what I ſhall term the ſecond ſtage of the diſeaſe, a very different proſpect preſents itſelf.

itself. The patient may even, in very advanced periods of the disease, derive advantage from a well-regulated diet and other circumstances, by which his situation will be rendered much more comfortable than it otherwise would be; but in this situation a complete removal of the disease is scarcely to be expected: at least little dependence is to be placed upon the remedies usually employed for this purpose.

This very distressful stage of seminal weakness is often the consequence of Onanism long persisted in; and it is, as we have remarked, the frequent consequence of Gonorrhœa and Gleet. In all such cases the disease seems to proceed from real weakness, or debility in the excretory ducts of the vesiculæ seminales; for it commonly happens where the whole system is much relaxed and emaciated; where there is therefore no cause to imagine that it can arise from too plentiful a formation of semen; and of which, indeed, we often meet with a very decisive proof,

from a conſtant mucous-kind of oozing being perceived in the urethra, while no ordinary cauſe of excitement is capable of producing any regular diſcharge or emiſſion of ſemen.

In this ſituation a variety of remedies are employed, chiefly with a view to reſtore and invigorate the tone of the weakened parts; ſuch as bark, ſteel, balſamum copaiba, and cold bathing. At other times, where the diſeaſe is ſuppoſed to proceed from a deficiency of ſemen, provocatives are preſcribed; ſuch as high ſeaſoned foods, all the terebinthenate balſams, and cantharides. But although I have had many opportunities of obſerving a complete trial of theſe, I never knew any advantage derived from them. The only courſe, which in ſuch circumſtances I ever knew prove uſeful, was ſuch as merely tended to reſtore the patient to his uſual ſtate of health. If Onaniſm has induced the diſeaſe, nothing will afford even the chance of a recovery till this is left off. Whatever may have been the cauſe of it, he ought

to

to be put upon a nourishing diet; and he should live in an elevated, dry situation. Sea-bathing should be advised; and costiveness, with every thing that might tend to irritate the parts chiefly affected, should be avoided.

With a view to lessen that degree of irritability with which this disease is usually connected, opiates have been advised; but although I have often given them a full trial, I never knew any real advantage obtained from them. On the contrary, they have often appeared to do harm; for although they procure rest, yet the sleep which they give is always disturbed; the patient awakes in a state of more anxiety and distress than he experienced on going to bed; and when opiates are habitually used, costiveness can scarcely be prevented but by means of remedies which in this situation ought not to be given.

Hemlock is often used here; but I have never known any obvious advantage derived from it. Hyocyamus, by acting as an anodyne, while it does not produce costive-

coſtiveneſs, has in different inſtances appeared to prove ſerviceable. One grain of the extract may be given at firſt, and the doſe increaſed in a gradual manner to three, five, ſix, eight, and even ten grains.

Conceiving, from ſome circumſtances connected with the diſeaſe, as well as from many of the ſymptoms which enſue from it, that it may in ſome inſtances be of the ſame nature with paralyſis, I have, in ſeveral caſes, adviſed electricity, and in one or two of theſe it appeared to prove ſerviceable, but never ſo decidedly as to enable me to ſpeak of it with confidence.

SECT-

SECTION IV.

Of Obstructions in the Urethra from Gonorrhœa Virulenta.

WHEN speaking of Gleet we had occasion to observe that it is often the consequence of Obstructions in the Urethra. But Gleet, although the cause of some inconvenience and distress, is by no means the symptom of most importance with which Obstructions are accompanied. Strictures may take place in a certain extent, without giving much uneasiness, but whenever they arrive at such a height as to impede the flow of urine, they prove always the cause of distress and misery to the patient, and of much embarrassment to the practitioner.

Obstructions proceeding from Gonorrhœa Virulenta may be reduced to four general

general heads; tumours in the ſubſtance of the urethra and contiguous parts ; ſpaſmodic affections of the urethra ; caruncles, or fleſhy excreſences, in the urethra ; and ſtrictures, properly ſo called.

§ 2.

Of Tumours in the Subſtance of the Urethra and contiguous Parts.

WE have already had occaſion to ſpeak of Tumours, or ſwellings of the proſtate gland, of ſwellings of Cowper's glands, and of the other ſmaller glands of the urethra. All of theſe produce obſtruction to the flow of urine whenever they become of ſuch a ſize as to diminiſh, in any degree, the magnitude of that canal.

Referring to what has already been ſaid upon this part of our ſubject, I have at preſent to obſerve, that in the commencement of all Tumours in theſe parts, we ought, by every method in our power, to

endea-

endeavour to remove them by difcuffion, for which purpofe local and general blood-letting are the remedies chiefly to be depended on; and as thefe, when carried a fufficient length, and when affifted by a cooling regimen, and the external ufe of cold faturnine applications, feldom fail in removing them, they fhould always be perfifted in as long as there is the leaft chance of their proving ferviceable. For although tumours in this fituation are often eafily removed after fuppuration has taken place, by the matter being freely difcharged, and the fore treated in the ufual way, yet, before arriving at this fize, a good deal of diftrefs always occurs from them, and, in fome inftances, the fores heal with difficulty, while in others the matter burfts into the urethra, where it continues often during the life of the patient to excite a great deal of diftrefs.

In others again it burfts into the fcrotum, and from thence into the furrounding cellular fubftance, and openings forming in confequence of this, commonly between

tween the ſcrotum and anus, a very trouble-ſome diſeaſe is thus produced, termed fiſtula in perineo*.

It is therefore obvious that it is much for the advantage of the patient that all tumours of this kind ſhould be removed by diſcuſſion; but when our endeavours for this purpoſe do not ſucceed, and when ſuppuration takes place, we have it often in our power to prevent many of the bad conſequences which otherwiſe are apt to enſue. By opening ſuch tumours immediately on matter being perceived in them we prevent the riſk of their burſting into the ſcrotum and urethra, ſo that in this ſituation we ought never to wait till they are ſo fully maturated as otherwiſe might be proper: and when once they have come ſo far as to render it proper to diſcharge the matter, it ought to be done, as we have formerly obſerved, by making an opening the whole length of the tumour. This prevents the matter from lodging, and from inſinuating into the contiguous

* For the treatment of this vide Syſtem of Surgery, chapter xv.

parts,

parts, while the sores which ensue heal more kindly than they usually do when smaller openings have been made.

Among other consequences which sometimes occur from matter bursting from abscesses in this situation into the contiguous parts, it is proper to mention that the most distressful effects occur from its finding access to the corpus cavernosum of the penis. It usually spreads suddenly over the whole substance of the penis; small openings take place in different parts of the swelling, at which the matter is discharged; and these are always very difficult to heal: or, if the matter does not find a vent in this manner, it either bursts into the urethra, or the surrounding parts are apt to mortify.

When mortification occurs in this situation it either soon proves fatal, or terminates in the entire loss of the penis; for a stop is seldom put to the disease till all the parts surrounding the urethra are destroyed, when amputation of the remainder becomes unavoidable. Indeed the hæmorrhagy

rhagy which is apt to occur from deep-ſeated mortification of the penis is commonly of itſelf a ſufficient motive for amputation being adviſed, for we can ſeldom put an effectual ſtop to the diſcharge till the mortified parts are all removed.

For preventing mortification in this ſituation from ſpreading, opium has been recommended. I have certainly obſerved it prove uſeful in gangrene, both in theſe parts and in others; but more dependence is for the moſt part to be placed upon a plentiful uſe of bark. Whether or not opiates act in the cure of gangrene as anteſeptics, is not, or, perhaps, cannot be aſcertained. I rather believe that they do not; and I am inclined to think that they prove ſerviceable only by allaying irritation. In this manner they may be employed with advantage wherever gangrene appears to be the conſequence of a high degree of inflammation. By leſſening or removing pain they may diminiſh the cauſe of exertion in the veſſels of the part affected, and may thus tend to prevent

morti-

mortification from extending fo far as it otherwife might do; but I have never known them prove ufeful where the difeafe feemed to depend upon lofs of tone, either of the part itfelf, or of the conftitution.

§ 2.

Of Spafmodic Obftructions of the Urethra.

IRRITATION of the Urethra, from whatever caufe it proceeds, has an evident effect in leffening the diameter of the paffage. Hence, in cafes of ftone in the bladder, the irritation, and confequent contraction of the urethra, is fometimes fo great that a ftaff, even of a moderate fize, cannot be introduced. Stones in the kidney have frequently the fame effect. Nay, I have known this contraction of the urethra induced by fand paffing along the ureters. In like manner the irritation produced in the urethra by Gonorrhœa, is in fome cafes fo great as to excite con-

traction of the paſſage in a very diſtreſsful degree. I have known the urine ſo completely obſtructed by this alone, as to give cauſe to ſuſpect that ſtrictures were formed of the moſt alarming nature; in which neither ſtaff, catheter, nor bougie, could be introduced, but with more force than can ever with ſafety be applied.

We judge that obſtruction proceeds from this cauſe, when at one time it occurs in a ſevere degree, and ſoon thereafter, perhaps in the ſpace of a few hours, it appears to be entirely or nearly gone. Of this I have met with various inſtances; in which, from the anxiety of the patient, and from ſuſpicion of a more inveterate kind of ſtricture, repeated attempts have been made in vain to paſs a bougie, and in which the ſtoppage has gone off entirely upon the exhibition of a doſe of laudanum, or rubbing the perineum with anodyne balſam.

As the urethra itſelf does not appear to be muſcular, as a ſmall portion of it only can be compreſſed by the muſcles of the penis,

penis, and as the obſtruction of which we are now ſpeaking occurs in parts of the paſſage where theſe muſcles do not exiſt, it has been imagined that this temporary acceſſion of ſtricture muſt be owing to ſome other cauſe. It may perhaps happen that the violent irritation excited by chordee may in ſome inſtances produce ſuch effuſion into the cellular parts of the penis as may compreſs the urethra; and that this may ſoon be removed by abſorption, on the irritation by which it was produced being taken away. But although this may be the caſe in a few inſtances, I am convinced that it is not a frequent occurence, and that the urethra itſelf is endowed with a contractile power, by which, for the moſt part, this kind of obſtruction is produced.

Were it to proceed from any kind of effuſion compreſſing the urethra, the tumefaction thus produced would be obvious. Partial circumſcribed tumours would either be diſcovered in the courſe of the urethra, or the whole body of the penis,

or a considerable part of it, would be swelled. We do not find, however, that this is apt to happen; at least, in most cases of this kind no tumefaction of the penis is perceptible.

This kind of spasm or cramp occurs occasionally in every part of the urethra. I have met with it within an inch of the extremity of the glans, but for the most part it happens behind the scrotum, or nearer the prostate gland, in the membranous part of the passage.

In the treatment of Obstruction in the Urethra it is a matter of the first importance to determine the cause by which it is produced. It is particularly necessary to distinguish between obstruction arising from spasm, and that which proceeds from stricture of the passage. In the latter, bougies, as we shall afterwards see, are almost the only remedies upon which we can depend, while, in cases of spasm, they very commonly do harm. In the one they remove the disease by acting as wedges; in the other they add to the violence of the contraction by increasing the irrita-

irritability by which it was at firſt excited.

As the degree of obſtruction produced by ſpaſm alone is, in ſome inſtances, equal to what uſually occurs from the moſt obſtinate kind of ſtricture, it is only from an exact account of the riſe and progreſs of the diſeaſe by which we can judge of the difference.

When the flow of urine has at firſt been perceived to be ſlightly obſtructed, and when this has gradually become worſe, without ever being in any inſtance materially better, there will be much cauſe to imagine that it proceeds from a cauſe of a fixed nature: while, on the contrary, however complete an obſtruction may be, if it came on ſuddenly, and if it frequently becomes quickly well without any obvious reaſon, there will be no cauſe to doubt of its proceeding from ſpaſm.

We find too, in obſtruction proceeding from cauſes of a more fixed nature, that ſome pain is always diſcovered at one or more fixed points. In ſome caſes a degree of hardneſs is perceived on the urethra

being pressed at these points; while in others, although nothing can be discovered on external pressure, the patient feels a degree of heat and pain, as if the parts affected were excoriated, or even ulcerated. Besides, in real stricture, a discharge of matter very universally takes place from the urethra; forming, as we have already had occasion to see, a very frequent cause of Gleet. But in obstruction proceeding from spasm, any pain which occurs in the urethra does not proceed from one point. It appears to be more diffused; and is seldom in any distressful degree, if it be not by the stoppage which it gives to the flow of urine. No particular spot is discovered to be hard or sore upon pressure, and a discharge of matter does not necessarily take place in it.

Spasm, indeed, may be accompanied with a flow of matter from the urethra. This will always happen where Gonorrhœa or Gleet have previously existed; but it will never, on enquiry, be found to be the cause of the discharge.

The

The remedies to be employed for the removal of this variety of obſtruction are, warm emollients, anodynes, blood-letting, bliſters, and electricity. Bougies, in certain circumſtances, may be alſo employed.

Rubbing the parts affected, whether the perineum, or more anterior parts of the penis with warm oil, proves ſometimes uſeful. Oil, ſtrongly impregnated with camphor, and Goulard's form of the unguentum ſaturninum, when applied warm to the parts affected, alſo tend to remove this cauſe of obſtruction. I have ſometimes known it inſtantaneouſly removed by fomenting the perineum with a decoction of chamomile flowers or althea, or by the application of a bladder filled with warm water.

The common anodyne balſam makes an uſeful application here. The parts in which the ſpaſm is ſeated ſhould not only be rubbed with it, but pledgets immerſed in it ſhould be kept conſtantly applied to them. But one of the moſt powerful antiſpaſmodics among external applications

is, a mixture composed of three parts of laudanum and one of æther.

Frequently, however, little or no advantage is derived from the external application of anodynes; while opium, given internally, is productive of the best effects. Forty drops of laudanum, given by the mouth, will often remove a spasm of the urethra that has resisted every variety of this remedy applied to the skin; and when thrown up the rectum, in the form of injection, it proves still more effectual in removing pain, irritation, and spasm about the anus, and in the organs of urine and generation, than when received into the stomach.

Whether this may proceed from the remedy getting more nearly into contact with the nerves of the diseased parts, or whatever may be the cause of it, is perhaps difficult to determine; but, from much experience of their effects, I am convinced, that in all such affections, opiates prove most powerful when given in this manner.

In plethoric conſtitutions blood-letting is often the moſt effectual remedy, not only in carrying off the ſpaſm which preſently ſubſiſts, but in preventing returns of it in future. Beſides the diſcharge of blood from the arm in quantities proportioned to the ſtrength of the patient, leeches ſhould be applied along the courſe of the affected parts, and they ſeldom fail where the conſtitution can ſupport the evacuation, of giving very effectual relief.

From an idea of ſpaſmodic affections proceeding in moſt inſtances from what is termed a weakneſs of nerves, and from a dread which very univerſally prevails, of all ſuch affections being rendered worſe by blood-letting, this is a remedy we find very rarely employed. But it is proper here, as well as in ſimilar affections of other parts, to obſerve, that morbid irritability may be excited by cauſes of a very oppoſite nature. It ſometimes takes place where the conſtitution is relaxed and reduced; and, in ſuch circumſtances, evacuations of every kind very commonly do harm.

harm. But it more frequently happens from a ſtate of plethora, in which blood-letting proves the moſt certain remedy, and where opiates, warm bathing, and other antiſpaſmodics are often uſed for a great length of time, without any effect reſulting from them.

We find from experience, that a ſtimulus applied to the ſkin proves often uſeful in relieving pain and ſpaſm, in parts that are very deeply ſeated; and upon trial, the ſame remedies are ſometimes found to remove ſimilar affections of the urethra. Obſtructions of this kind have, in different inſtances, been relieved by the application of volatile liniment, a ſtrong impregnation of oil with volatile alkali, to the parts affected. A bliſter, applied over the perineum, has in different inſtances carried off obſtructions of the urethra; and in ſome caſes where bliſters failed, the diſeaſe has been completely removed by the application of a warm plaſter.

In ſuch caſes bliſters do not ſeem to act ſo much by the evacuation which they pro-

produce, as by the irritation which they excite; for it often happens that the pain and ſpaſm are removed as ſoon as the ſkin becomes in any degree uneaſy, and long before veſications can be formed. Hence, a warm plaſter, which does not contain ſuch a quantity of cantharides as to render it capable of acting as a bliſter, by keeping up a more continued ſtimulus than bliſters, proves, in ſome inſtances, more effectual.

Electricity has ſometimes proved uſeful in removing ſpaſm of the urethra: but it requires to be managed with caution, otherwiſe it is apt to add to the violence of the diſeaſe. In plethoric habits it always does miſchief, and ought never to be adviſed in theſe till blood-letting has been premiſed.

I have had occaſion already to remark, that in this variety of obſtruction, bougies are very apt to do harm. This proceeds from their being puſhed with violence, when the parts, from being under ſome high degree of irritation, are in a ſtate of

ſtrong

strong contraction. This ought never, therefore, to be done; for while the parts remain in this situation we seldom succeed; or if we do get the bougie passed, it is always from the use of more violence than ought to be employed.

But bougies prove highly serviceable, even in Spasmodic Obstructions of the Urethra, when the violence of the disease is so far removed that they can be introduced with ease, and without exciting irritation: so that, whenever we find this can be accomplished, whether the spasm has been lessened by the use of emollients, anodynes, blood-letting, or any other remedy, it ought always to be advised. Besides the present relief which it affords, by removing any degree of the obstruction which may remain, it tends more effectually than any other remedy to prevent a return of it. This is particularly the case where spasm is conjoined, as sometimes happens, with the more fixed kind of obstruction, which we are presently to proceed to consider. When this

takes place all our other remedies are to be confidered merely as preparative to the ufe of bougies, which, in fuch circumftances, are alone to be depended on for a cure. It muft always be remembered, however, that bougies are only admiffible when they can be introduced and retained in the paffage without exciting much uneafinefs.

In all difeafes of the genitals the ftate of the inteftines requires particular attention. So much fympathy fubfifts between thefe parts that in people liable to obftruction in the urethra, I have known a fevere fit of the difeafe induced by a coftive ftool. Neither is much purging neceffary or proper. The bowels fhould be kept in fuch a ftate as to prevent irritation, as far as it can be done, in the rectum and contiguous parts.

§ 3.

Of Obſtruction in the Urethra from Fleſhy Excreſcences, or Caruncles.

OBSTRUCTION to the paſſage of urine has long been conſidered as one of the moſt diſtreſsful, as it is one of the moſt frequent conſequences of Clap; and Caruncles, Fleſhy Excreſcences, or Carnoſities, as they are ſometimes termed, are mentioned by all the older writers upon this ſubject, as the moſt frequent cauſe of it.

This idea naturally aroſe from their perceiving that warty ſubſtances were ſometimes formed within the urethra, near to its extremity, ſimilar in appearance to thoſe which often occur upon the prepuce and glans; and not proſecuting the ſubject by opening the parts after death, they were led to ſuppoſe that the more deep-ſeated obſtructions were all of a ſimilar nature.

So

So universally did this opinion prevail, and it was so strongly asserted in books, that although it was long ago, by some individuals, particularly by Saviard and Dionis, supposed to be ill-founded, yet even in our times it has been very generally admitted. This is so far the case, that in common conversation upon this subject, Caruncles are usually considered as the most frequent cause of all such obstructions.

It is now, however, very certainly known that this cause of obstruction is an uncommon occurrence in the more remote parts of the urethra. Of late years this has become a very frequent object of anatomical investigation; and I have reason to suppose, from all that I have yet heard, as well as from the result of my own enquiries, that it seldom exists farther up the urethra than half an inch or so, from the point of the glans. Warty excrescences are not unfrequently found towards the orifice of the urethra; but I have seldom seen them, even in this situation, where they

they did not likewise prevail upon the glans and prepuce.

The obstruction to the flow of urine from this cause is seldom considerable; but it always occasions much anxiety to the patient, from a fear which he is apt to entertain of its becoming worse.

When seated just in the opening of the urethra, as sometimes happens, I have, in different instances, been able to remove them with sciffars, and with small ligatures passed round them; but they are seldom so situated as to admit of our taking them off in this manner. Neither are we at liberty to destroy them by the application of escharotics, the irritability of the urethra rendering this a very hazardous attempt.

In all such cases we place our chief dependence upon bougies; and, when duly persisted in, they seldom fail in effecting a cure.

Some difference of opinion has arisen as to the manner in which bougies act in removing these excrescences. In strictures of

of a different kind there is no cause for doubt upon this point, as they evidently act entirely as wedges, and prove useful in proportion to the extent of mechanical pressure which they afford; but in the cure of Caruncles they have been supposed to act chiefly by inducing suppuration upon the diseased parts, and dissolving them in this manner.

It is obvious, however, that in the cure of these excrescences, there is something farther necessary than the formation of matter. Indeed instances occur daily of their being constantly immersed in matter, sometimes proceeding from their own surfaces, and at other times from the contiguous parts, without their being diminished. I rather conceive that bougies, even in this variety of obstruction, operate partly by mechanical pressure, and partly by exciting inflammation in the excrescences. We shall hereafter have occasion to see, that some of the remedies employed for the removal of warts in other parts prove chiefly useful by making them inflame; and as bou-

gies are well calculated for this purpoſe, I think it probable, that while they evidently anſwer a good purpoſe by the preſſure which they afford, they prove likewiſe ſerviceable by exciting over theſe excreſcences that ſlight degree of inflammation, which, in the treatment of common venereal warts, very commonly makes them drop off.

§ 4.

Of Obſtruction in the Urethra from Strictures, properly ſo called; of Bougies, and Fiſtulæ in Perineo.

IN the more fixed kinds of Obſtruction, proceeding from Gonorrhœa, the diameter of the Urethra is leſſened in two different ways. For the moſt part it is diminiſhed by a thickening taking place at ſome particular point in the membrane of the paſſage itſelf, or rather in the corpus ſpongioſum urethræ, in a ſimilar manner to what frequently happens in the membrane

brane of the nofe in cafes of catarrh. At other times the urethra is drawn together, or contracted, as if a cord was tied round it, without any other difeafe being perceptible.

In fome cafes, again, thefe two affections are conjoined; and we find, in the fame perfon, the diameter of the paffage leffened in one part by a mere contraction, and in another, by a fwelling and thickening in the fubftance of the urethra itfelf.

Every part of the paffage is liable to ftrictures; but they are more frequent behind and immediately above the fcrotum, than in any other part. In fome cafes a fingle ftricture only takes place; but when the difeafe has fubfided for a length of time, we very commonly find the paffage contracted in different parts.

Where the urethra is merely drawn together, the difeafe feldom extends, at any one part, above the eighth part of an inch, but where the ftoppage proceeds from a fwelling of the fubftance of the urethra it-

ſelf, it ſometimes extends to the length of an inch.

From whatever cauſe the ſtricture may proceed, we commonly find that the urethra is affected equally all round; but it is very properly remarked by Mr. Hunter, that, in ſome caſes, the diſeaſe ſeems to be fixed entirely on one ſide of the paſſage, in which caſe the canal is thrown over to the oppoſite ſide.

This ſeems to happen only where the obſtruction is produced by ſwelling of the urethra, and not where it proceeds ſolely from contraction.

Where this unequal diminution of the canal takes place, even in one part only, it is obvious that it muſt add greatly to the difficulty of introducing bougies; and where more than one affection of this kind occurs, if they be not exactly oppoſite to one another, a kind of twiſting of the paſſage takes place, which renders the paſſing a bougie impracticable. It muſt, however, be admitted, that inſtances of this are rare.

It

It is somewhat remarkable that the formation of strictures is often so gradual, that a patient is not sensible of their taking place till the disease has been of long continuance. Being seldom attended with pain till the flow of urine is much impeded, any partial degree of it passes without notice, by which they are apt to be rendered much more fixed and permanent than otherwise they would be. The patient, indeed, has seldom any suspicion of strictures, till the surgeon, for his own satisfaction, where Gleet continues more obstinate than usual, proposes to introduce a bougie. Gonorrhœa having given rise to the Gleet, any difficulty that occurs to the passage of the urine is considered to arise from the same cause; and thus a great length of time often elapses before any such examination is made as can with certainty lead to a discovery.

This proves often, in its consequences, highly distressful, and ought therefore to be as much as possible guarded against; for strictures, by long continuance, be-

come much more firm, as well as more extensive, than they were at firſt, by which they become much more difficult to cure. Caſes which at firſt would have yielded almoſt to the firſt attempt with bougies, are, by delay, often rendered ſo obſtinate that nothing will remove them but the moſt exact application of bougies being continued for a great length of time.

In all caſes, therefore, in which there is the leaſt cauſe to ſuſpect that ſtrictures may exiſt, an examination ſhould be made with bougies. But as patients themſelves are apt to be deceived upon this point, practitioners ought, in every inſtance, to lead their attention towards it. In different parts of this work we ſhall have occaſion to ſee that Gleet is frequently kept up by ſtrictures; ſo that whenever a running becomes in any unuſual degree obſtinate, if there be not ſome other evident cauſe for it, a trial with a bougie ſhould be propoſed. This, however, is ſeldom attended to; by which much unneceſſary trouble, as well as loſs of character, falls upon

upon the practitioner, while the patient is made to ſuffer a great deal of miſery which might have been prevented.

We have already had occaſion to remark that the ſtrictures of which we are now ſpeaking are conſequences of Gonorrhœa: but in what manner they are produced by Gonorrhœa is perhaps difficult to explain. They have been attributed chiefly to ulcers induced by the diſeaſe, and to inflammation.

At one period I was induced to ſuppoſe, chiefly from the information I had from books, that ſtrictures were in moſt inſtances produced by ulcers. But from more frequent opportunities of obſerving the ſeat of Gonorrhœa after death, I am now convinced that ulcers very ſeldom take place here, by no means ſo frequently as ſtrictures, the diſeaſe they are ſuppoſed to produce. It ſometimes indeed happens, that the membrane of the urethra covering ſtrictures, is found in a ſtate of tenderneſs, or of excoriation, but not compleatly ulcerated. This appears too to be

the effect of the disease rather than the cause of it. It seems to proceed, in some degree, from the tumefaction of the membrane of the urethra, which often occurs in strictures, and in some measure from the acrimony of the matter which these very strictures produce.

When ulcers are met with in Gonorrhœa, they are in most instances, I believe, produced by the rupture of one or more blood vessels. If it be not at the very point of the urethra, they never proceed from the matter of Lues Venerea. Now we can scarcely imagine that any ulcer which the rupture of a blood-vessel in the urethra could probably produce, would be of such depth or magnitude as to be attended with any important consequence of this kind. Neither are hæmorrhages from the urethra frequent; nor have I found that strictures have been particularly apt to happen, even where hæmorrhages have taken place in an alarming degree.

I con-

I consider it, therefore, as decided, that strictures in the urethra seldom or never proceed from ulcers. Inflammation, when violent, may certainly tend to produce them; and I think several instances have fallen within my own observation where this actually happened. I do not suppose, however, that this is such a frequent cause of strictures as is commonly imagined, nor do I agree with those who think that injections often produce them.

As it was observed that strictures were, in some instances, induced by inflammation, and injections being supposed, by those who are prejudiced against them, very apt to inflame the urethra, it was long ago asserted, and has since by many been believed, that they tend more frequently than any other cause, to produce strictures. This, indeed, is held forth as the most important objection to the use of injections, and were it in any degree well-founded, I admit that it would be a strong reason for laying this remedy entirely aside: for however desireable it may be to

have

have the running in Gonorrhœa quickly carried off, and however efficacious injections may be, no practitioner would adviſe them were it to be with the riſk of inducing ſuch a formidable diſeaſe as ſtrictures often are.

Where ſtrong ſtimulating injections are unguardedly uſed, ſuch a degree of inflammation may thus be induced as may be productive of the moſt obſtinate ſtrictures. But this is not the fault of the remedy, as I have elſewhere obſerved, being entirely the effect of an improper application of it. We might with equal propriety condemn the uſe of ſome of our moſt effectual and ſafeſt medicines, merely from an over-doſe having done harm.

Inſtead of injections being a frequent cauſe of ſtrictures, I have much reaſon to think that they are more effectual than any other remedy in preventing them. Although I have admitted that ſtrictures are ſometimes produced by ſevere degrees of inflammation, I do not conſider this as a frequent occurrence. Strictures I conceive

ceive to be moſt frequently the conſe-quence of a ſtate directly the reverſe of in-flammation. In a great proportion of caſes they will be found to take place, where, either from no injection being uſed, or from ſome other cauſe, the diſcharge has gone on to a very unuſual length, where all ſymptoms of inflammation were gone long before, and where nothing but a Gleet remained. At leaſt this has been very generally the reſult of my obſerva-tion, and, I believe, it will be admitted by all who have paid attention to the point in queſtion. I therefore conclude from this, as well as from the appearances which theſe parts exhibit on diſſection, that this variety of obſtruction proceeds moſt fre-quently from a ſtate of morbid relaxation or debility, induced in theſe parts of the membrane of the urethra upon which the inflammation at firſt fixes with moſt vio-lence, and from which the ſubſequent diſ-charge is in a great meaſure produced.

Where ſtricture ſucceeds immediately to inflammation, it appears to be that va-

riety

riety of it in which the urethra is compreſſed, or tied, as it were, with a cord: but where it does not appear till the inflammation ſubſides, and the diſcharge has been of long duration, the ſubſtance of the urethra is found, at thoſe parts where the ſtrictures exiſt, ſpongy, ſoft, and prominent, bearing every mark of having compleatly loſt its tone.

The exiſtence of this variety of ſtricture being aſcertained, and it will not be confounded with any other diſeaſe where the obſervations contained in the preceding parts of this ſection are kept in view, our next object is to fix upon the method of cure.

While the opinion prevailed of ſtrictures being moſt frequently produced by ulcers in the urethra, as this led to the ſuſpicion of their being connected with Lues Venerea, mercury was adviſed in almoſt every inſtance. Mercurial ointment was regularly rubbed upon the ſeat of the diſeaſe, in order to diſſolve the cauſe of the obſtruction, and the patient was put

under a salivation, with a view to the safety of his constitution.

As this was the prevailing practice of our best surgeons, both here and in other parts of Europe, when I entered upon business, I was necessarily led to adopt it; but later experience having shewn that mercury is never necessary in the cure of strictures, I have now for many years past laid it altogether aside. Nay, I readily own that I never knew any advantage derived from it, while in many instances, when long persisted in, it evidently did harm.

It will not be imagined, that during this late period of time, mercury was ever alone depended upon for the removal of strictures in the urethra. Bougies were then very generally employed; but mercury, for the reason I have mentioned, was always advised along with them.

Bougies had long been known to practitioners, but they were so coarsely formed, and their application so little understood, that scarcely any advantage was derived from them, till Mr. Daran, about

fifty

fifty years ago, brought them into more general notice. By forming them with care, and introducing them with addrefs, Mr. Daran had the credit of giving us the only remedy upon which we can place any dependence for the cure of ftrictures. At leaft we are certainly in a great meafure indebted to him for bringing them into general ufe.

It is true that Mr. Daran attributed virtues to his bougies which they did not poffefs. Being much interefted in the fale of them, he wifhed to throw a myftery over their compofition. They acted chiefly, he faid, by their fuppurative quality: in confequence of which, and by the great difcharge of matter which they produced, tumours, and other caufes of obftruction in the urethra, were, he alledged, diffolved by them, which could never otherwife have been removed. The confidence with which this was afferted, by a man of Mr. Daran's experience, and the confiderable difcharge of purulent-like matter which ufually accompanies the ufe of bougies, gave weight

to

to an opinion which at laſt came to be very generally adopted.

We now know, however, that it is not by exciting a diſcharge of matter that bougies act in the cure of ſtrictures. Even the mildeſt bougie we can employ, when kept in the urethra for an hour or two, is covered with a kind of matter on being withdrawn; but this happens as readily where the urethra is ſound as when it is obſtructed in various places, and it proceeds entirely from the natural mucus of the paſſage being increaſed in quantity, and ſomewhat altered in appearance, by the irritation excited by the bougie.

Even admitting the obſtructed parts to be more particularly acted upon, and a greater diſcharge of matter excited from them than from the other parts of the urethra, and which Mr. Daran aſſerted to be the caſe under his management of the bougie, ſtill this would not account for the removal of excreſcences; for we know, from daily obſervation, in other parts of the body, that the whole ſurface of excreſcen-

ces

ces of a similar nature to those which Mr. Daran supposes to take place here, may be kept in a state of complete ulceration, and a great quantity of matter discharged from them for a great length of time, without any diminution of their size.

Bougies, in the cure of these strictures, seem to act solely by pressure, and the support which they afford to the diseased parts. If a bougie, of sufficient firmness, exactly or nearly the size of the urethra in its contracted state, be passed at first, and others of a larger size afterwards introduced, we know from experience, that if done with caution, no harm will ensue, and that the stricture for which it was employed will thus, in a gradual manner, be removed, merely by the pressure of the bougie.

In this view, our chief object in the forming of bougies should be to give them a firmness sufficient to afford support to the parts which we wish to compress, and a smoothness and flexibility which will admit of their being introduced and retain-

ed

ed in the urethra with the greateſt poſſible eaſe.

Numbers 34, 35, 36, and 37, in the Appendix, contain preſcriptions for bougies of different colours and conſiſtences, with ſome directions for the method of preparing them; but the exact formation of bougies being a matter of the firſt importance, and this being only to be acquired by extenſive experience, it is better for ſurgeons to procure them from thoſe whoſe ſole profeſſion it is to make them, than to attempt to form them themſelves.

Beſides the forms of plaſters mentioned in theſe preſcriptions, other articles have been employed for the conſtruction of bougies, particularly cat-gut and reſina elaſtica. Of theſe the latter is by much the beſt, and for all the ſmaller kinds of bougies I now find it to be preferable to the beſt bougies of the common kind. Even when of the ſmalleſt ſize it can be made of ſuch a degree of firmneſs as to admit of being puſhed with conſiderable force, which is not the caſe with the

ſmaller kinds of common bougies, which are apt to bend, and to become twiſted, although introduced with much care and attention.

The great expence of bougies of this kind has hitherto prevented them from being ſo generally known as they ought to be: beſides, they were at firſt made ſo ſoft that they nearly diſſolved in the urethra on being allowed to remain in it for the ſpace of an hour or two; but this fault is now ſo entirely removed, that I have known them remain in the paſſage ſeven or eight hours at once, and yet as firm on being withdrawn as when firſt introduced. This renders it a valuable article, not only for bougies, but flexible catheters.

This reſin has one very eſſential advantage over every compoſition that has yet been employed for bougies. It does not crack or break while in the urethra, however frequently it may be introduced. When the common bougies are prepared with much attention, and the compoſition of

of which they are formed is not too much boiled, they may ſometimes be uſed two or three times with ſafety; but, in moſt inſtances, they cannot with propriety be introduced more than once. Nay, many of them, on remaining an hour or two in the paſſage, are ſo much cracked as to excite a great deal of irritation and pain even on their firſt introduction, inſomuch that I have met with different inſtances where patients had been deterred by this cauſe alone from uſing bougies, the irritation which they excited being ſo great as to be perfectly inſupportable; while, on having recourſe to thoſe formed of reſina elaſtica, they were found to create no kind of uneaſineſs.

Theſe bougies are formed of fine ſilk, or linen, dipped in the reſin diſſolved in æther. They were originally invented by Mr. Thedn, of Berlin, and now are made by different artiſts in Paris. There is cauſe to regret that the art of forming them is as yet confined to a very few, ſo that our

ſupplies have hitherto been both ſcarce and uncertain.

In the uſe of bougies the following are the points which particularly require attention:

1. They ſhould be provided in ſuch numbers, and of ſuch variety of ſizes, that there may be no doubt of as many being at hand as in any caſe may be requiſite.

2. On proceeding to introduce the firſt bougie, care ſhould be taken to fix upon one of ſuch a ſize as will probably paſs without exciting much pain. It is better at firſt to have it rather ſmaller than might be made to paſs, than be afterwards under the neceſſity of withdrawing it. Of this we may in general judge by the ſize of ſtream in which the urine is obſerved to flow. It is often indeed found to be forked, and ſometimes flattened, owing to the form and nature of the ſtricture, but, with ſome attention to this circumſtance, we may, for the

the most part, be determined in the size of bougie that will answer.

3. The patient should be placed in such a posture as tends in the most effectual manner to relax the urethra. He may either be made to stand, with his thighs separated, and his body bent gently forward, or he may be laid upon his back, with his thighs not only separate, but raised. He ought, on no account, to be seated. In sitting the urethra is apt to be so much compressed that no space is left for the passage of a bougie. I have known several unsuccessful attempts to pass a bougie from this cause alone.

4. The surgeon being seated on the right side of the patient, should grasp the penis with his left hand, and, at the same time should draw it gently forward, so as to stretch the urethra to such a degree as may prevent it from catching the point of the bougie. With the bougie previously well oiled, in his right hand, he should

inſert the point of it into the urethra, when it muſt be paſſed ſlowly, though firmly on, till it meets with ſome reſiſtance. Neither ſhould he deſiſt at once on the ſtricture being met with. It anſwers better to continue to puſh on the bougie with a due degree of firmneſs, than to withdraw it immediately, as is often done. The firſt application of a bougie to the obſtruction is very apt to excite irritation and ſpaſm, even in the ſtricture itſelf; and I have often thought that this was more eaſily overcome by puſhing the bougie on at firſt, than by any ſubſequent introduction of it.

5. A knowledge of the force that may with ſafety be employed in paſſing a bougie can only be acquired by experience. The leſs violence that is done to the urethra, or to the cauſe of contraction, the better. It cannot, in ſome caſes, be done without pain, but it ſhould never be made to force a diſcharge of blood. When blood comes away, the inſtrument ſhould be in-

ſtantly

ſtantly withdrawn: for when this takes place, we may always be certain that ſome parts have been injured which ought not to have ſuffered, and by continuing to force on the bougie, that there is a conſiderable riſk of its forming a new paſſage for itſelf.

6. The diſtreſs which enſues from a new opening being formed by a bougie is apt to be ſo great, that nothing ſhould be omitted that can in any way tend to prevent it. When there is cauſe to ſuſpect, from the quantity of blood diſcharged, that the membrane of the urethra is injured, the bougie ought not to be again introduced for ſeveral days; not till there is reaſon to ſuppoſe that the wound in the urethra is healed, for, till this takes place, it is obvious that it would be very apt to renew the injury.

7. As bougies ought all to be of a conical form, they ſhould not be puſhed farther at firſt than freely through the firſt ob-

ſtruction, otherwiſe the contracted part is apt to be torn open with too much force. It anſwers better to proceed gradually, and to increaſe the ſize of the bougie, or to puſh one of the ſame ſize farther on, in ſuch a manner as may avoid every riſk of injuring the membrane of the urethra.

It is true that cures will be obtained where bougies have been introduced with much violence; where violent pain, accompanied with hæmorrhagy, has been excited: but this is a practice, which, for the reaſons I have mentioned, ought never to be adopted.

8. The bougie being introduced, ſome attention is required to prevent it from ſlipping altogether into the urethra, as well as for retaining it in the depth at which it is inſerted. We obtain the firſt of theſe objects by bending the end of the bougie, which, for this purpoſe, ſhould be left at leaſt half an inch out of the urethra; and the uſual method of retaining a bougie in its place is, by tying a piece of ſoft cotton thread

thread to the end of it, and fixing it with this either directly to the penis, by passing it once or twice round above the glans, or connecting it to the circular belt of a common suspensory bandage. But the most effectual method, as well as the easiest, which I have tried, is fitting the penis with a small bag or pouch of cotton or linen. The bougie being introduced with its end bent down, the bag must be put over the penis, and being fixed with two pieces of tape to a circular belt round the body, the bougie is in this manner easily retained.

Common bougies being of no great value, may be cut of such a length as to leave half an inch or so out of the urethra, for the purpose of bending down in the manner I have mentioned; but those of the elastic gum should be kept of every variety of length, from three or four inches to nine or ten; and being easily formed with a knob at the large end, they are thus, in the most certain manner, prevented from slipping in.

9. When

9. When this caution has been neglected, and when a bougie is thereby allowed to ſlip completely into the urethra, it is ſometimes, by the aukward attempts of the patient, forced altogether into the bladder.

In this ſituation it cannot be removed but by cutting into the bladder, as is done in the operation of lithotony, and extracting it with forceps. But while the bougie continues in any part of the urethra it may be taken out by an operation of much leſs importance and hazard.

When the end of the bougie can be ſeen, it may with ſome care and attention be laid hold of with a ſmall hook, or with narrow-bladed forceps, ſuch as are uſed for extracting ſtones that fix near to the end of the urethra. But when it has paſſed ſo far in that it cannot be perceived, this method of extraction will not ſucceed.

In this caſe it can only be got out by making an inciſion upon it directly into the urethra.

urethra. The skin should be first drawn back, when a cut should be made through the teguments and urethra at once, of at least half an inch in length, when, if the end of the bougie can be laid hold of, it may be taken out at this opening; or if this be not practicable, it may be pushed forward till the end of it passes out at the end of the urethra. This may be done either with small forceps or pliers, or by sticking a pin into the bougie at the opening and pushing it slowly on. The wound for the most part heals easily.

10. The circumstance which next requires attention in the use of bougies is, the time they should be allowed to remain in the urethra, and the frequency with which they should be introduced.

As bougies act, perhaps, entirely in the cure of strictures by the pressure which they afford, and prove chiefly useful by the total change of structure which they induce in the parts to which they are applied, they must necessarily require a considerable

ſiderable time for effecting this. The longer, therefore, that they are retained in the urethra, the ſooner will this be accompliſhed. But while we attend to the removal of the ſtricture, care muſt be taken to prevent injury by their exciting too much irritation. This, indeed, is the circumſtance by which we ought to be chiefly directed. It may be laid down as a general rule that bougies may be retained in the urethra as long as they excite no pain or irritation; while, in every inſtance, they ſhould be withdrawn as ſoon as much pain is produced by them.

At firſt they can ſeldom be allowed to remain longer than half an hour at once; but on the urethra being for ſome time accuſtomed to receive them, they may, for the moſt part, be left in it for ſeveral hours; and this may be repeated once and again during the courſe of the day.

11. During the time that bougies remain in the urethra the patient ſhould be prevented from walking or moving more than

is abſolutely neceſſary. This is not uſually attended to with neceſſary ſtrictneſs, by which many are prevented from deriving that advantage from bougies which otherwiſe they would receive.

In walking with a bougie in the urethra the irritation induced by it is at all times conſiderable; but this more eſpecially, when common bougies are employed. The motion in walking is apt to crack and break the plaſter of which they are formed, which renders their ſurfaces rough and unequal, by which it is obvious that much harm muſt be done.

12. In order to obtain the advantage of perfect reſt while bougies are introduced, we are adviſed by many to employ them only at bed time, and to allow them to remain in the paſſage during the night. This may anſwer when the patient is not liable to nocturnal erections, but where theſe are apt to occur it ought never to be permitted. I have known ſeveral inſtances of much pain and inflammation induced by it.

it. It may, in ſome circumſtances, be more inconvenient to apply bougies during the day, but it is evident that it may be done with more ſafety.

13. To admit as long a retention as poſſible of bougies in the paſſage, ſome have alledged, that the patient may with ſafety be allowed to void urine while they remain in it. I have known this done and no harm enſue, where the urine was paſſed ſlowly, and with much caution: but I have alſo known the attempt do much harm, and as the trouble of introducing the bougie a ſecond time is not equal to the hazard of allowing it to remain, I always adviſe it to be withdrawn on a deſire to void urine taking place.

Beſides the pain and inflammation which want of attention in this matter is apt to induce, and erections occurring during the introduction of bougies have likewiſe this effect, I have known different inſtances of its appearing to lay the foundation of ſpaſmodic affections of the urethra, which af-

terwards

terwards proved very obſtinate, even after the original ſtrictures were removed.

14. By gradually increaſing the ſize of the bougie, the ſtricture through which it is paſſed will at laſt be removed; but before it is entirely deſtroyed it will be proper to puſh forward the bougie, to diſcover whether there is any other cauſe of obſtruction or not. It is better, however, not to make the attempt till the opening through the firſt is conſiderably enlarged, when it will much more readily ſucceed.

Whatever other ſtrictures are diſcovered they muſt be managed in the manner we have adviſed for the firſt; the bougie muſt, if poſſible, be made to paſs through them all, and the ſize of it gradually increaſed till the urethra is opened to its complete natural ſize.

15. In paſſing bougies for this purpoſe, it has been a point in diſpute whether they ſhould be carried the length of the bladder,

der, and allowed to remain in it or not. I am decidedly of opinion that they ſhould be paſſed completely into the bladder as ſoon as this can be done, in order to diſcover the utmoſt extent of the ſtrictures; but I alſo think that they ſhould never be allowed to remain in the bladder. The common bougies are ſo apt to crack, and pieces of the plaſter to fall off, that this might very poſſibly happen from their being immerſed in urine; and we all know, that if a particle ſhould drop, not ſmall enough to paſs off with the urine, that it would probably ſerve as a nucleus for a ſtone. This would not ſo readily happen with bougies of elaſtic gum; but even theſe, where there is ſo much hazard, ought not to be truſted, particularly as there is no real neceſſity for it in the management of ſtrictures; for it is found upon diſſection, that they are always ſeated anterior to the neck of the bladder. They are often in the membranous part of the urethra; but they have, perhaps, never been

been met with in the proſtate gland, I mean in the urethra as it paſſes through this gland.

It muſt be admitted that the urine is often obſtructed by affections of this gland; by inflammation, as well as by a more indolent kind of ſwelling, to which, as we have elſewhere had occaſion to ſee, it is ſometimes liable. But this variety of obſtruction, inſtead of being removed by bougies, is always injured by them. We are ſometimes under the neceſſity of paſſing a catheter, even during an inflamed ſtate of the proſtate gland; but this ſhould only be done for drawing off the urine when it has been completely ſuppreſſed. When the gland has been for ſome time ſwelled in ſuch a manner as to create a ſtoppage to the flow of urine, it is obvious from its firmneſs, that bougies cannot remove it, while, by the irritation which they excite, they never fail to do harm.

16. Beſides the length of time which bougies ſhould be kept inſerted daily, it is

an object of importance to determine at what period they may with safety be laid aside. This, I must acknowledge, is difficult to do, as it depends upon a variety of circumstances with which it is impossible at all times to be acquainted. Even where the stricture is so completely removed that bougies pass with ease, and the urine is voided in a full stream, the disease is apt to recur if the bougies be too soon left off. They should, in every instance, be worn for a considerable time after all appearances of stricture are gone, and the more obstinate the disease has been the longer they should be continued.

Even after a patient considers himself as so entirely well that he may conceive no hazard to ensue from the farther use of bougies being entirely dropped, still he ought to have them at all times in his possession, so as to be able, on the least return of obstruction, to employ them instantly. This is a precaution not often adverted to, but which ought never to be disregarded by any who has suffered in this manner;

and I think it the more neceſſary to inſiſt upon it, from ſeveral inſtances having fallen within my own knowledge of the moſt diſtreſsful conſequences enſuing from a neglect of it. It is more particularly proper for all people in this ſituation, going upon a journey, to be well provided with bougies; for when from home they cannot always readily meet with them, while, at the ſame time, they are more expoſed to the various cauſes moſt apt to excite a return of the diſeaſe. Theſe particularly are, expoſure to cold and dampneſs; much fatigue, whether on foot, horſeback, or in a carriage; and exceſs in wine and ſpirituous liquors.

All of theſe cauſes act with ſuch certainty in inducing a return of affections of this kind, that I have ſeldom known them fail where people have been much expoſed to them; and, in moſt inſtances, their effect is perceived ſoon after their application. I have known a perſon, who, after being completely cured of ſtrictures for ſeveral years, has been ſeized with a very

hazardous and painful return of the diſorder, in the courſe of an hour or two after being much expoſed to a cold eaſt wind. It is particularly apt to occur from violent exertion on horſeback, and from being much overheated with wine; more eſpecially from exceſs in port wine.

A return of ſtricture is alſo apt to ariſe from the urine being at any time too long retained after a deſire takes place to paſs it. This ought always to be guarded againſt; but I alſo think it right to mention, that patients ſometimes err in getting into the habit of voiding urine too frequently. By yielding immediately to every impulſe, ſuch a habit takes place, that they are apt, from this cauſe alone, to continue during life to paſs it every hour or two. This proves not only very inconvenient, but it is alſo apt to induce a contracted ſtate of the cavity of the bladder, together with a thickening of its coats, its full diſtenſion which naturally ought to occur from time to time, being thereby prevented. Hence it is a matter

of

of no ſmall importance for patients in this ſituation to obſerve as juſt a medium as can be done between the two extremes which we have mentioned.

On the leaſt return of ſtricture being perceived, whatever the cauſe may be, a bougie ſhould be immediately introduced. The patient, if he is plethoric, ſhould be blooded in proportion to his ſtrength; his bowels ſhould be opened with a gentle laxative, or with a clyſter; and he ſhould be kept in bed till the violence of the diſeaſe be removed. In this manner I have known the moſt formidable attack ſoon carried off, while, from treating them with inattention, even the moſt trifling ſymptoms have been rendered ſevere, and in the higheſt degree obſtinate.

The ſudden and unexpected manner in which patients are often attacked with a return of theſe affections, has given cauſe to ſuſpect that they muſt, in ſuch inſtances, proceed from ſpaſm. But the obſtinacy with which they often continue, as well as every other circumſtance attending them,

renders it obvious, that in a great proportion of cafes they proceed from caufes of a more permanent nature than fpafm is almoft ever found to be.

17. We have hitherto been fuppofing that the ftrictures are of fuch a nature as to permit a bougie to be paffed with no great difficulty; in which cafe, no doubt can be entertained of our being able, by perfeverance, either to accomplifh a cure, or to afford at leaft very effectual relief, and to prevent any alarming obftruction from taking place to the paffage of the urine; for however bad a ftricture may be, if bougies of a fmall fize can be paffed at firft, we may always be able, as I have already obferved, in a gradual manner, to introduce thofe of a larger fize. But frequently, either from the paffage being contracted to a very fmall fize, or from the ftricture being altogether on one fide of the urethra, by which the paffage is thrown over to the oppofite one, after a variety of attempts we find no progrefs

made,

made, or if any thing is gained, it is ſo inconſiderable as to afford no kind of relief. This proves always very diſpiriting to the patient, and is apt to diſpoſe practitioners not much verſant in this branch of buſineſs to deſiſt from all further trials: conſidering the diſeaſe to be incurable, they preſcribe a courſe of palliatives, which, for the moſt part, avail little, while the only remedy from which advantage could be expected is deſerted.

This ought never to be done, at leaſt it ought never to come on the part of the practitioner, nor can any thing warrant the meaſure but the patient himſelf being determined againſt the farther application of bougies. This, from impatience and diſappointment, is apt to happen; but it ought at all times to be as much as poſſible reſiſted. Even in the moſt obſtinate obſtruction that occurs, if the paſſage be not altogether obliterated, a ſurgeon of experience will ſcarcely fail, if he be not prevented by the impatience or timidity of

his patient from perſevering for a due length of time.

18. When there is cauſe to ſuſpect that the paſſage is thrown over to one ſide of the urethra, by the ſtricture being fixed in the other, a point in which we may ſometimes be determined by external examination with the fingers, and moſt frequently by the feelings of the patient, the extremity of the bougie ſhould be ſlightly curved or bent before being inſerted, and the point of it being turned towards that ſide where the paſſage is underſtood to be, if carried on in this direction we will ſometimes ſucceed, when various attempts have failed in the uſual manner. It will be readily ſuppoſed that the curvature given to the bougie muſt be very inconſiderable; but even the ſlighteſt will ſometimes give it the direction which we wiſh it to take, while it does not prevent it from paſſing with ſufficient eaſe along the urethra.

19. In

19. In the introduction of a bougie it ought to be kept firm between the finger and thumb of the right hand, and pushed gradually forward till it reaches the stricture; but when it has got this length, it commonly answers better to twirl it between the finger and thumb, taking care to push it gently forward at the same time. At least I often succeed in this manner when the usual method of pushing it directly on, has failed.

20. I have already observed that no more force should be used in the introduction of a bougie than is merely necessary for making it pass; but it is proper to remark, that in the hands of a surgeon of experience, much more force may with safety be applied than others can with any propriety venture to employ. By pushing a bougie slowly and gradually forward, we often force it through strictures without any discharge of blood taking place, while much pain and laceration is sometimes produced even by less violence, when

when applied in a hurried or quick manner.

21. When we find upon trial that a ſmall bougie, nearly the ſize of the opening, is made to paſs, no force will be afterwards required, if the bougies be gradually increaſed in ſize. But when we find, upon repeated trials, that the remaining paſſage cannot be diſcovered, and when we therefore mean to employ more force, a bougie of greater ſtrength ſhould be uſed in place of the ſmaller one. The ſmall ſized bougies, particularly thoſe of the common kind, are ſo eaſily bent that they ſhould never be employed where much force is required. I have known even ſurgeons of experience puſh forward bougies of this kind, and concluding that they had paſſed the ſtricture, have carried them on till they imagined they had nearly reached the bladder, when, on being withdrawn, they were twiſted up in the form of a cork-ſcrew, having never gone farther than the ſtricture.

With a firm, well-polifhed bougie of elaftic gum, well rounded at the end, and not fmaller than a crow's quill, fuch a force may be applied as will often fucceed when no advantage can be derived from thofe of a fmaller fize; and we fhould not be deterred from proceeding although the firft trials prove unfuccefsful, for we often pafs the ftricture by perfeverance when no advantage was gained at firft.

I have reafon indeed to imagine, from what has happened in the courfe of my own practice, that few cafes will occur which may not ultimately be cured by bougies. But when they do, in what manner are we to proceed? When every trial that we dare venture upon with bougies fails, what are we to do? This, it is evident, muft depend entirely upon the ftate of the parts affected, and upon the degree of obftruction which takes place.

If there is ftill fuch an opening left as admits of the urine paffing off with tolerable eafe, I would advife nothing farther to be done. A patient, in fuch a fituation,

had

had better ſubmit to the inconvenience of paſſing it ſlowly, and even frequently, than to the operation of removing the ſtricture, which conſiſts in laying the obſtructed part of the urethra open, and in the frequent introduction of a bougie during the proceſs of the reunion of the divided parts. This, however, is an operation of much importance: it is attended with ſo much pain, and with ſuch uncertain ſucceſs, that no practitioner of experience would recommend it while the urine is not totally obſtructed; and long before this could probably happen, the ſituation of the parts lying between the ſtricture and the bladder is commonly ſuch as to induce the patient to ſubmit more readily to any operation that may be neceſſary than he ever would have done in a more early ſtage of the diſorder. Whenever the ſtricture occaſions much difficulty to the flow of urine, that part of the urethra lying between the ſtricture and bladder is neceſſarily diſtended on every attempt to void urine. This frequent ſtretching at laſt weak-

weakens the lining membrane of the urethra: the urine is at firſt in ſmall quantities, and afterwards in larger, forced into the ſurrounding cellular ſubſtance: this forming one or more ſmall tumours, at laſt burſts out through a correſponding number of openings, either in the perineum, or in the cellular part of the ſcrotum. At leaſt this is the uſual progreſs of ſuch tumours when the ſtrictures in the urethra by which they were produced cannot be removed.

This is the moſt frequent cauſe of the diſeaſe we have already had occaſion to mention, Fiſtula in Perineo, in which the urine continues to flow out at the newly forced openings, as long as the ſtrictures in the urethra are allowed to remain, and which accordingly, as we have already obſerved, makes the patient eaſily ſubmit to whatever may be neceſſary for removing them. In ſuch circumſtances nothing will prove ſucceſsful if the diſeaſed parts be not freely laid open. A ſtaff being introduced the length of the ſtricture, and a

ſmall

ſmall probe paſſed in at one of the openings, and carried to the oppoſite ſide of the ſtricture, the intermediate ſpace ſhould be laid open by an inciſion in the direction of the urethra. In this manner the cauſe of obſtruction will be diſcovered and removed, and the other ſinuſes communicating with the urethra being likewiſe laid freely open, a cure, even of the worſt caſes that occur, may thus be frequently obtained. To enter more fully into the conſideration of this operation, and of the after treatment of the ſores, would here be improper, as it would extend this article to too great a length. It could not be done with preciſion and clearneſs without entering upon the general doctrine of fiſtula, and upon the different methods of cure that have been propoſed for it; and as this has been done in a different work, I muſt now refer to what I had then occaſion to ſay upon it *.

Before concluding the conſideration of ſtrictures in the urethra, I think it neceſ-

* Vide Syſtem of Surgery, chapters xv and xx.

ſary

ſary to notice a method of cure that has been propoſed where we fail in the introduction of bougies, the repeated introduction of cauſtic into the urethra, with the view of deſtroying the cauſe by which the ſtricture is produced.

This practice prevailed upwards of a hundred years ago, but was ſoon relinquiſhed. It has lately, however, been revived, or rather a propoſal made for reviving it, by Mr. Hunter of London, under whoſe direction it is to be hoped that it will ſoon become as generally uſeful as we can ever expect it to be. But as I conſider this practice as more or leſs hazardous, and not likely to prove often effectual, I ſhall briefly ſtate what leads me to form this opinion, that others may be on their guard againſt too implicit an adoption of it.

The introduction of cauſtic into the urethra muſt prove hazardous from two circumſtances, our not being able, even with all the pains we can take, to apply it to the ſtricture alone, without injuring the

the contiguous parts of the urethra, and the riſk which there muſt always be of ſome ſmall portion of the cauſtic breaking off and being left in the paſſage.

Mr. Hunter has indeed invented a very neat apparatus for the introduction of cauſtic. It conſiſts of a ſilver tube, open at both ends, nearly the thickneſs of a common catheter, with a port-crayon, ſomewhat longer than the tube, into which the cauſtic is fixed. A ſtillette, with a perfectly round end, is firſt paſſed through the tube, and if it be exactly fitted to the end of it, the two together may be carried with perfect eaſe along the urethra till they come in contact with the ſtricture, when the ſtillette is to be withdrawn, and the port-crayon, with the cauſtic fixed in it, introduced. The cauſtic being applied to the ſtricture for about the ſpace of a minute, muſt be withdrawn along with the inſtrument, and this muſt be repeated every two or three days till the cauſe of obſtruction is removed.

This,

This, from defcription, appears perfectly fimple, and of eafy execution; but notwithftanding the ingenuity of the invention, it is obvioufly liable to the two objections which I have mentioned. We know, even where parts are uncovered, and therefore immediately under view, that it is exceedingly difficult to deftroy difeafed parts with cauftic, without injuring the contiguous found parts. In the urethra, therefore, where we receive no advantage from the eye, and where the flighteft deviation of the inftrument may fix the cauftic upon the urethra itfelf, inftead of the ftricture, there muft evidently be a good deal of hazard from this circumftance alone, independent of the chance of injuring the contiguous parts merely by the fpreading of the cauftic, admitting it to be applied with all manner of exactnefs.

Befides, as the fize of cauftic that can be paffed in this manner is neceffarily very fmall, there muft always be fome hazard of its flipping out or breaking off, an occurrence from which the higheft degree of

diſtreſs would enſue; for it could not be extracted, and dilution could not be employed with ſuch effect as to prevent it from doing a great deal of miſchief.

Another very important objection occurs to this practice. A great proportion of all ſtrictures, perhaps nearly nine of a hundred, are ſeated beyond the curve of the urethra, to which an inſtrument ſo ſtreight as a tube acting as the conductor of another body ought to be, cannot be carried. But Mr. Hunter, foreſeeing the difficulty, has endeavoured to remove it by propoſing that the end of the tube ſhould be flexible, and of the ſame form with the common flexible catheter of ſilver. But this, while it apparently adds to the ingenuity of the invention, renders it evidently more hazardous. The ſmall point of cauſtic contained in the port-crayon will be more apt to be broken or looſened in paſſing through a curved tube than through a ſtreight one, while it will not be poſſible to apply it to any one point with ſuch firmneſs and ſteadineſs.

But even admitting that caustic may with safety be conveyed to strictures in the urethra, yet, in those cases which do not yield to the use of bougies, the obstruction is generally of considerable extent, and the quantity of caustic necessary for removing it so great that the contiguous sound parts of the passage must be much injured, whatever care and attention we bestow in the application of so active a remedy. On these accounts, it would appear, that for the removal of strictures in the urethra, the application of caustic is either impracticable or unsafe. In all slight obstructions of the urethra a degree of force may be used with bougies, sufficient for removing them. Whenever this can be done, no person will doubt of the propriety of preferring them to the use of caustic; and when the cause of obstruction is of such extent as to render our attempts with bougies unsuccessful, there will be little or no room to hope that caustic will answer the purpose. In other parts of the body we all know how difficult it is to re-

move even the callous edges of an ulcer with caustic. Nay, in many instances, new parts seem to form before the eschar produced by the previous application of the caustic has come off. I have no hesitation, therefore, in saying, that in similar affections of the urethra, proceeding to the extent which we here suppose them to do, caustic would either be altogether inadequate for the purpose, or must be applied in such quantities as would be attended with a great deal of hazard.

In all such circumstances, I consider it as preferable to let the disease take its usual course. The worst that can happen is, the formation of sinuses behind the strictures, and the discharge of urine from the openings which these produce. Few patients incline long to submit to this; but I consider the cure of this state of the disease, by the mode of treatment already pointed out, as more certain, while it is obviously much less hazardous than the means proposed for preventing it by the application of caustic.

SECT.

SECTION V.

Of deranged Senſations in the Bladder, Urethra, and contiguous Parts.

ON the running and other leading ſymptoms of Gonorrhœa becoming moderate, all the others uſually abate, and the patient, for the moſt part, is perfectly well ſoon after the diſcharge leaves him.

This, however, is by no means univerſally the caſe, for it ſometimes happens that a good deal of diſtreſs remains long after the diſcharge is completely removed, and as the ſymptoms which take place in this ſtate of the diſeaſe are of a nature which cannot be referred to any particular head, I have judged it proper to ſpeak of them in a ſeparate ſection.

Without any fixed pain, a patient, who from the diſcharge and other ſymptoms

of Gonorrhœa leaving him, has cauſe to imagine that his cure is completed, will be ſuddenly ſeized with uneaſineſs over his loins; painful feelings over all the region of the bladder, particularly about the neck of it; a ſenſe of wearineſs on the region of the kidneys, which ſometimes becomes much pained; a conſiderable degree of uneaſineſs over the whole courſe of the urethra, particularly about the glans, and a painful ſenſation of rolling, and other unuſual motions, in the teſticles.

In ſome caſes theſe ſymptoms, which ſeem to be confined to the organs of urine and generation, take place either in whole or in part by themſelves. At other times they are conjoined with affections of other parts, chiefly with thoſe of the ſtomach and alimentary canal. In one caſe they were accompanied with regular attacks of cholic, which had all the appearance, from the violent degree of pain which occurred, of proceeding from inflammation, but which always ſubſided immediately on the ſymptoms being removed by which it

ſeemed

ſeemed to be induced. In different inſtances I have known ſickneſs and vomiting ſucceed to that painful uneaſineſs to which patients in this ſituation are ſometimes liable in the kidneys.

Diſtreſsful feelings frequently occur in the rectum, which give cauſe to ſuſpect, in ſome inſtances, that they proceed from piles, and in others from tumours forming in the end of the gut. A painful teneſmus often accompanies this ſet of ſymptoms.

In ſome almoſt every ſymptom occurs which uſually takes place in ſtone in the bladder. A dull, heavy pain is felt at the neck of the bladder, which ſpreads along the urethra, and fixes upon the glans. The patient is diſtreſſed with frequent deſire to paſs water, and, in paſſing it, it often ſtops ſuddenly when coming off in a full ſtream.

In a few caſes ſymptoms of paralyſis occur, both in the bladder and urethra. The patient at one time finding it difficult, or even impoſſible, to force the urine out

of the bladder, while, at others, it runs off in drops, without his being able to retain it.

Theſe unequal ſtates of the power of paſſing and retaining the urine will ſometimes occur alternately, ſeveral times in the courſe of the ſame day; while at times one of them will continue for ſeveral days together, and at laſt will diſappear ſuddenly, after having reſiſted every remedy that had been employed for it.

It will readily be ſuppoſed, however, that all of theſe ſymptoms cannot probably occur at the ſame time in the ſame patient, but every practitioner muſt have met with all of them in different patients.

At the ſame time that they take place with ſome variety, they likewiſe occur in very different degrees. In ſome they are ſo ſlight as merely to excite ſome trifling degree of uneaſineſs, and ſo tranſient, that they come and go frequently in the courſe of the ſame day; while, in others, they are ſo fixed and permanent that the patient remains in a ſtate of conſtant diſtreſs, and expe-

experiences ſuch a degree of it as he is ſcarcely able to ſupport.

In women, the bladder, kidneys, and abdominal viſcera, are equally liable to be affected as in men; and they are alſo apt to be diſtreſſed with uneaſineſs about the neck of the womb, and bearing-down pains, ſtretching to the thighs.

Even in the moſt firm-minded people the ſymptoms I have deſcribed prove frequently very diſtreſsful; but where the mind is weak, and the imagination eaſily affected, they arrive in ſome inſtances at the moſt alarming height. In whatever degree they may appear, they are attributed to the preceding diſeaſe having either been improperly treated, or not completely cured; and when this occurs in a mind prone to fears and anxiety, the diſtreſs which they are apt to excite, is in ſome inſtances ſo great, as can ſcarcely from ſuch a cauſe be ſuppoſed to exiſt. Whether a courſe of mercury be adviſeable or not, the patient is never ſatisfied till this medicine be preſcribed; for he is always afraid that his conſtitution

ſtitution will be ruined if mercury be omitted. If this proves ſucceſsful, or if he gets well when under it, he remains completely ſatisfied; but when this does not happen, as is the caſe in moſt inſtances, he then believes that he is incurable, and that his ſituation is deſperate. Every variety of noſtrum is now had recourſe to: by the effect of theſe, and ſtill more by the agony of mind under which he labours, his conſtitution at laſt begins to ſuffer; he gradually becomes weaker and emaciated; and if his life is prolonged, it is almoſt always a ſcene of anxious inquietude and diſtreſs.

The cauſe of all or any of theſe ſymptoms it is often impoſſible to explain. Were they to happen chiefly where the previous inflammation has run high, or where the patient, when under cure, had been particularly apt to indulge in venery, exceſs of wine, or bodily fatigue, one or other of theſe cauſes would tend to account for them. But this is by no means the caſe. They are met with as frequently where the

the diseafe has been of a mild nature, and where it was cured in an eafy manner, as where the fymptoms have been fevere and obftinate. Where this takes place we are apt to fuppofe that they are moftly, if not entirely, of an imaginary nature, and to treat them accordingly. This, to a certain degree, may often be proper, as it may fortify the mind of the patient againft thofe ill-grounded fears to which he might otherwife be expofed; but we are not to fuppofe that fymptoms of this kind are always ideal, merely from our not being able to account for them, or from the previous Gonorrhœa having been of fuch a mild nature as we may imagine ought not to have produced them. I have met with inftances of this, where the previous difeafe was exceedingly mild, and where no obvious affection of the parts was perceptible, and yet the violence of the diftrefs in fuch a degree as kept the patients in a ftate of conftant mifery.

Many of the fymptoms enumerated above are fuch as are produced by tumours about

about the neck of the bladder, particularly by affections of the proſtate gland, and by a contracted ſtate of the bladder itſelf. In ſuch caſes, the cauſe of the diſeaſe is at once rendered obvious by examination with the finger in ano; but at preſent we are ſuppoſing that no organic affection can be diſcovered either inwardly or outwardly, an occurrence by no means uncommon, and in which I therefore conclude that the ſymptoms proceed from a deranged ſtate of the nerves, produced by the previous affection of the urethra. I have accordingly arranged all of them under one general head of Deranged Senſations, nor is there cauſe, from the nature of the remedies found to prove moſt ſucceſsful in removing them, to treat of them ſeparately, nearly the ſame general treatment being found to anſwer in all of them.

Before proceeding to enumerate the remedies for affections of this kind, I may obſerve, that although we cannot in any caſe ſay poſitively what will accompliſh a cure, I can with certainty ſay what will

not

not anſwer. I have already remarked, that patients in this ſituation are apt to ſuſpect that their ſymptoms proceed from the previous diſeaſe having been improperly treated. This leads them to imagine that a latent poiſon is ſtill lurking in the conſtitution, and mercury being the only certain antidote for the venereal poiſon, they always inſiſt upon this being preſcribed. Some practitioners, ſtill entertaining the opinion of Gonorrhœa and Lues Venerea proceeding from the ſame infection, conſider it neceſſary to preſcribe mercury for all the conſequences of each of them, while others are readily prevailed upon, by the ſolicitation of their patients, to permit what they may ſuppoſe it would not be in their power to prevent. But from all the experience which I have had of it, I am clearly of opinion that no advantage is ever derived from it, while, in a great proportion of caſes, it evidently does harm. By relaxing the conſtitution it renders it much more irritable than it was before,

and thus tends to aggravate all ſuch ſymptoms as thoſe we are now conſidering.

The remedies upon which we chiefly depend are, blood-letting, opiates, warm bathing, bliſters, cicuta, hyocyamus, electricity, Jeſuit's bark, and cold bathing.

When the conſtitution is already much reduced and debilitated, blood-letting muſt neceſſarily be inadmiſſible; but whenever plethora takes place nothing proves more uſeful than blood-letting, both general and local, particularly the diſcharge of blood from the perineum, and parts contiguous to the anus, by the application of leeches. In ſuch circumſtances it removes or leſſens irritability with more certainty than any other remedy. Even where there has been cauſe to ſuſpect a tendency to paralyſis in the bladder and contiguous parts, leeches applied as near as poſſible to the ſeat of the diſeaſe have proved ſerviceable; nor need we ever heſitate in adviſing them where the patient is not much emaciated. But the remedy which, in all affections of this kind, proves moſt univerſally uſeful is opium.

opium. It not only sooths and allays the present distress, but when, by a well-judged, timeous application of it we can, for a week or two together prevent the accession of pain, we in this manner often accomplish a cure. It answers the purpose whether it be given by the mouth or in clysters, but it proves always most effectual when given in sufficient doses by the anus.

The external application of laudanum, and of anodyne balsam, in some cases affords relief, particularly when conjoined with æther. In those deranged sensations which sometimes occur in the perineum and about the neck of the bladder, immediate relief is often obtained by rubbing the parts affected with a mixture of warm laudanum and æther; and I have known the suppression of urine, which occurs from this cause, relieved in the same manner.

When opiates fail in procuring relief, or when they disagree with the patient, the semicupium sometimes succeeds.

Warm

Warm fomentations applied to the perineum, and over the loins, often prove uſeful; and the ſteams of warm vinegar, conveyed with attention to the parts affected, have likewiſe been uſed with advantage. The beſt article we can employ in ſuch caſes for fomentations is a ſtrong decoction of the heads of poppies.

Bliſters, in all ſuch affections, are perhaps the moſt effectual of all our external applications. It is chiefly, however, where the urethra ſeems to be the ſeat of the diſeaſe that they prove uſeful, and where the neck of the bladder is affected with ſuch a degree of weakneſs as prevents the urine from being retained by it. In the former, bliſters act with moſt advantage when applied to the perineum, and in the latter they ſhould be applied to the loins. The moſt diſtreſsful ſenſations produced by this cauſe, and which for many years have obſtinately reſiſted every other remedy, have, in ſome inſtances, been removed by the application of a bliſter to the perineum. In ſome caſes one proves ſufficient; but

in others they require to be repeated once and again before all the ſymptoms diſappear.

Upon the ſame principle with bliſters, exciting a return of the running after it has ſtopped, or after it has been diminiſhed in quantity, has at times been productive of ſome benefit. This may be done by fomenting the penis and perineum with warm water, the application of warm poultices to the perineum, and by a cautious uſe of bougies. The practice was probably ſuggeſted by ſymptoms of this kind having in ſome inſtances been removed by the patient getting a freſh attack of Gonorrhœa from a new infection, different caſes of which I have met with.

In all ſuch inſtances, where the inflammation recently induced is conſiderable, the previous ſymptoms are either much diminiſhed in violence, or entirely removed. This would lead to the practice of exciting an inflamed ſtate of the parts in a conſiderable degree, and which bougies will never fail to do, if covered with

oil of turpentine, with a ſmall quantity of common reſin melted in it; but as it is obvious that much harm would enſue from this practice being carried any great length, it ought to be managed in every inſtance with the greateſt delicacy and attention.

It may be proper to remark that it proves chiefly uſeful where the diſeaſe is confined to the urethra; although, in ſome caſes, it has ſucceeded even where the bladder and kidneys have been affected.

Where the urine in ſuch caſes paſſes off involuntarily, bliſters, we have ſaid, anſwer with moſt certainty when applied to the loins. This probably proceeds from the diſeaſe in theſe inſtances ariſing, for the moſt part, from an affection of the bladder itſelf; but where it proceeds, as it may ſometimes do, from a tendency to paralyſis in the urethra and muſcles connected with it, bliſters will prove moſt uſeful when applied to the perineum.

Where the urine paſſes off in this manner, balſam of copaiba, and other aſtringent balſams, are uſually given. They

are ſuppoſed to act chiefly by reſtoring the tone of ſuch parts as appear to be relaxed and weakened, and which it is imagined they muſt do, from their having a peculiar tendency to paſs off by the organs of urine. In like manner the internal uſe of cantharides is preſcribed, from an idea of this ſymptom depending, in every inſtance, on a loſs of tone in the parts affected, and from our knowing, that in moſt caſes, cantharides proves a powerful ſtimulus both to the kidneys and bladder.

All of theſe balſams, as well as the common turpentines, which are not eſſentially different, may in all ſuch caſes be uſed with ſafety. In ſome inſtances they may perhaps prove uſeful, and I do not imagine that they will ever do harm. This, however, cannot be ſaid of the internal uſe of cantharides. In large quantities they act as a poiſon: and even where managed with caution, the principle of the practice ſeems, in ſuch caſes as we are now ſpeaking of, to be doubtful; for as there is cauſe to ſuppoſe that the diſeaſe pro-

ceeds more frequently from too much irritability about the neck of the bladder and urethra, than from any deficiency of tone, there is reaſon to fear, that by increaſing the ſenſibility of the parts affected, they would in many inſtances be more apt to do harm than good. It is therefore proper, previous to the internal exhibition of cantharides, to determine with accuracy whether the diſeaſe proceeds from real weakneſs or morbid irritability. In the one caſe they may ſometimes prove uſeful; in the other they will be apt to add to the violence of the diſeaſe.

Cicuta has been frequently preſcribed here; and when given to ſuch extent as to act as an anodyne, it may ſometimes prove uſeful. Upon the ſame principle, hyocyamus may with propriety be preſcribed; but we have no reaſon to ſuppoſe that either of theſe articles act in any other manner in curing the diſeaſe. As no organic affection appears to take place here, they cannot act by diſſolving hard or enlarged parts. Any advantage derived

from

from them will therefore be nearly in proportion to the anodyne effects which occur from them; and in this view they may prove uſeful when opiates diſagree with the ſtomach, as in ſuch circumſtances it is of conſequence to have it in our power to employ remedies of a ſimilar operation.

Electricity has now and then given a temporary relief to ſymptoms of this kind. It ſhould be exhibited in the form of ſparks drawn from the parts chiefly affected, particularly from the perineum, and parts moſt contiguous to the neck of the bladder.

It is proper, however, to remark, that the ſame obſervations are applicable in adviſing electricity that were made upon the internal exhibition of cantharides. Both of theſe remedies, as well as the application of bliſters to the loins, have been chiefly preſcribed, where, in affections of this nature, the urine paſſes off involuntarily, and they are adviſed upon the idea of this ſymptom proceeding from paralyſis of the neck of the bladder. But as there

is much cauſe to imagine that the frequent diſcharge of urine, which patients in this ſituation are ſometimes diſtreſſed with, proceeds more from irritability in the neck of the bladder than from real weakneſs, there is reaſon to think that electricity, by increaſing the ſenſibility of the part affected, and which in many inſtances it evidently does, will rather tend to aggravate the complaint.

Bliſters, whether applied to the loins or perineum, may prove uſeful, not merely by the diſcharge which they excite, but by the irritation which they produce upon the ſkin. There is nothing more certain than our being often able to remove pain and irritability from one part by exciting it in others. Of this we have frequent proofs in the application of bliſters and other ſtimulants, in deep-ſeated pain in the ſide, where the diſtreſs is often removed as ſoon as the ſkin becomes warm and uneaſy, and long before any veſications are produced. Sinapiſms applied to the feet, have, in ſome inſtances, removed head-ach when

when every other remedy has failed. In like manner blisters seem to operate when applied to the perineum, for the removal of those sensations to which patients in this situation are sometimes liable. But electricity, as well as the internal use of cantharides, by tending to irritate the very parts in which the disease is seated, seem often to increase the violence of the symptom they were meant to remove.

By a due perseverance in the use of one or other of these remedies we commonly succeed in lessening, or even in removing the violence of the distress; but as the symptoms are apt to recur, even after the patient considers himself as well, it becomes an object of much importance to obviate this. For this purpose nothing proves so effectual as Peruvian bark and cold bathing. A free exhibition of the bark should therefore be prescribed, as soon as the pain and other symptoms have begun to diminish, and sea bathing should be advised whenever it can be obtained. When this cannot be procured, cold water should be applied lo-

cally, both to the perineum and loins. Some advantage is derived from the parts being bathed with it, but it proves more effectual when forcibly daſhed upon them.

An involuntary diſcharge of urine, which we have already had occaſion to ſpeak of, proves always troubleſome; but the diſtreſs which it excites is trifling when compared with what ariſes from the patient not being able to expel it. Even without any inflammation, and where no cauſe of obſtruction can be diſcovered in the urethra, a patient will ſometimes find it impoſſible to paſs a ſingle drop. This, no doubt, occurs frequently from other cauſes; but every now and then we meet with it as an evident conſequence of irritability in the parts chiefly affected in this diſeaſe.

All the remedies we have already adviſed will be equally applicable in the treatment of this ſymptom, as for the removal of any of the others. Opiates, however, and warm bathing, prove chiefly uſeful; but when relief is not ſoon obtained,

it

it becomes neceſſary to draw the water off with a catheter; and as much harm is apt to enſue from this being long delayed, it ought to be adviſed as ſoon as the bladder appears to be ſenſibly diſtended.

In ſome caſes the introduction of a bougie will prove effectual; and as this gives leſs pain and irritation than the paſſing of a catheter, it ought in the firſt inſtance always to be preferred. One of the largeſt that will eaſily paſs ſhould be made uſe of; and, after allowing it to remain in the bladder for a few minutes, the patient ſhould be deſired to paſs his water inſtantly on the bougie being withdrawn. This ought not to be done with much force and preſſure, otherwiſe the neck of the bladder and urethra are apt to contract inſtantly on the bougie being taken out; while the whole will paſs completely off if it can be made to flow eaſily at firſt, along with the bougie.

When this our intention in employing bougies is fruſtrated, we are under the neceſſity of employing the catheter; and,

as it is of much importance, in all ſuch caſes, to prevent irritation as far as it can poſſibly be done, catheters of reſina elaſtica ſhould be employed, inſtead of the common inſtrument of ſilver. It not only paſſes more eaſily, but when any difficulty occurs in getting it into the bladder it may, in ſome inſtances, be proper to allow it to remain for a day or two together, which can never, with any propriety, be done with catheters of ſilver.

The practice of leaving catheters in the bladder is ſpoken of by ſome with much eaſe, and they adviſe it wherever any permanent ſtoppage occurs to the urine; but I have in different inſtances ſeen ſo much miſchief produced by it, that it is a meaſure I never adviſe but where much pain and difficulty occurs in the introduction of a catheter. In moſt inſtances, more pain is experienced from the inſtrument being allowed to remain in the bladder than ever occurs from its being frequently paſſed. Beſides the irritation which even the

the ſmootheſt and ſofteſt inſtrument of this kind excites, they are apt to prove hurtful by incruſtations of calculous matter forming upon them, in conſequence of depoſitions from the urine. There are few people whoſe urine is ſo free of this kind of matter as to prevent a catheter, inſerted into the bladder, from becoming rough with it in a very ſhort ſpace of time. This practice, therefore, ought never to be adopted but where the greateſt difficulty is experienced in introducing the catheter.

SECTION VI.

Of Swellings of the Teſticles.

A Swelling of one of the Teſtes is a very frequent occurrence in Gonorrhœa. From the reſemblance which it bears to a hernia, and from its being ſuppoſed to proceed from the running or humour in Gonorrhœa falling down upon the teſtes, it is uſually termed a Hernia Humoralis.

In ſome inſtances both teſticles ſwell. They ſeldom, however, ſwell both at once; but the ſwelling, on leaving one teſticle, is very apt to go to the other; and when both have in this manner been affected, they ſometimes ſwell alternately for a conſiderable time together. I have known this happen for the ſpace of a year and upwards, where the patient, during the whole period,

period, was never completely free of the diſeaſe.

In long continued affections of this kind the pain becomes inconſiderable; but the firſt attack of the diſeaſe is always accompanied with ſevere pain. The firſt warning which the patient receives of it is a very painful ſenſation in one of the teſtes, ſtriking along the ſpermatic cord, near to the middle of his back. On examining the teſtis he finds it ſwelled, and ſo tender that he can ſcarcely bear it to be touched. He feels himſelf hot, and a general uneaſineſs prevails over his whole body, particularly over his thighs and abdomen. Neither can he move without increaſing the violence of every ſymptom.

At firſt the ſwelling is confined to the epididymis; the back part of the teſticle feels hard and enlarged; but in a very ſhort ſpace of time, often in the courſe of an hour, the whole body of the teſticle becomes ſwelled. In this ſtate of the diſeaſe a difference is ſtill perceptible between the teſtis itſelf and the epididymis. The latter

latter is hard, and ſomewhat unequally ſo; being, for the moſt part, hardeſt and moſt prominent at the bottom: whereas a ſoft, uniform ſwelling prevails over all the anterior part of the teſticle.

In the progreſs of the diſeaſe, indeed, even the teſtis itſelf becomes hard, and if the means employed for preventing it do not prove ſucceſsful, the ſwelling of the epididymis and teſtis together come to form a tumour of very conſiderable magnitude, accompanied with a red, inflammatory affection of the ſcrotum.

In this ſtate of the diſeaſe, the pain is often intenſe, accompanied with a very diſtreſsful ſenſation of the teſtis moving or rolling about. The ſkin is dry and parched, the tongue foul, thirſt prevails, and the pulſe is full, and quick. In ſhort, every ſymptom takes place which uſually attends a high degree of local inflammation.

There is no period of Gonorrhœa in which this affection of the teſtis does not occaſionally ſupervene. It occurs in all

ftages of the difeafe; even towards the end of it, when both the patient and furgeon are apt to confider the cure as nearly complete: and in fome we find it take place where no caufe can be affigned for it, where neither the degree of the previous inflammation, nor the mode of life of the patient, were fuch as could in any fatisfactory manner account for it.

It is proper, however, to remark, that fwellings of the teftis which take place in this manner, feem, for the moft part, to be of a very different nature from thofe which occur during the virulent ftate of the difeafe, and while the inflammation in the urethra is confiderable. The latter appear to be altogether inflammatory. The difeafe proceeds more flowly to its height or acmé. It remains more permanently at the fize to which it arrives, and it difappears more flowly than the others, which come to their utmoft height, in fome inftances, in an hour or two from the firft approach of the fwelling, and again difappear with equal rapidity. Thefe I con-

ceive

ceive to be partly inflammatory, and that in part they proceed from that kind of sympathy which evidently subsists between the penis and testis, and which renders the one very apt to suffer from any disease with which the other may be affected.—That sympathy has much influence in the production of this variety of the disease, is obvious from the swelling being apt to leave one testis, as we have already observed, and to fix, perhaps instantly, upon the other. This does not occur so frequently as the alternate affection of the eyes, from one of them only being at first affected, but every practitioner must have met with instances of it.

As it is observed that the running in Gonorrhœa is apt to stop on the first appearance of a swelled testicle, this gave rise to the idea of the affection of the testis proceeding from the matter falling down upon it, in consequence of being thus obstructed in its passage through the urethra. It is now well known, however, that no communication subsists between the

the urethra and testes, by which matter can pass from the one to the other; nor does the appearance which a swelled testicle affords give reason to imagine that it proceeds from this cause. Instead of being soft and compressible, which it necessarily would be were it produced by matter, it becomes daily harder, till it arrives at a certain magnitude, when it gradually becomes softer again, but without any fluctuation of matter being perceived in it.

There is reason to imagine, that in most instances the testes become affected by the inflammation spreading from the urethra along the vasa deferentia. This has been doubted by some, but without any good reason being assigned for it, nor has any other mode of accounting for it been suggested. We see that by the vasa deferentia a direct communication takes place between the urethra and testes, and the first appearance of a swelled testicle commences in the epididymis, formed as it were by the termination of this very line of communication. In a great proportion of

cases too, the patient is sensible of a pain stretching from the swelled testicle along the groin, which we know to be the direct course of the vas deferens.

A variety of other causes might be mentioned, which tend to excite inflammation in the testes in a similar manner with Gonorrhœa: among these are, the irritation produced by a stone in the neck of the bladder; by the irritation on the introduction of a catheter or bougies; and the inflammation which takes place in these parts after the operation of lithotomy. A swelling of one or both testes is not an unfrequent occurrence from all of these, particularly from the latter, and from the use of bougies, especially when they are not properly introduced; and we see no manner in which it can be so readily produced as by the irritation excited about the neck of the bladder, carried along the vasa deferentia.

The consequences of swelling of the testes, which we have most to dread are, a hardened state of the parts, chiefly of the epi-

epididymis, which, even when one, but more certainly when both testes are swelled, is apt to be followed by impotency; and a morbid irritability, which is sometimes so great as to prevent the patient for a considerable time from using any kind of exercise, and from following the ordinary occupations of life, without hazarding a return of the swelling of the testes. Suppuration in the body of the testes, from the inflammation induced by Gonorrhœa, is hardly an object of regard, for it does not take place in one of five hundred cases.

But the two circumstances I have mentioned of a permanent hardness in the epididymis, and that distressful irritable state of the testis itself, which are apt to succeed to this disease, are objects of the first importance, and require an immediate application of every remedy that can probably tend to prevent them. Scarcely any occurrence can prove more troublesome or inconvenient than swellings of the testis; and an enlarged state of the epididymis,

dymis, when it takes place in any confiderable degree, has, in many inftances, as I have already obferved, the effect of inducing impotency. To a certain degree, a fwelling of the epididymis often continues for a great length of time; in fome inftances, during the life of the patient, without any bad confequence taking place, particularly when one tefticle only is affected. But I have known fo many inftances of the contrary, and of fuch diftrefsful effects enfuing from it, as makes me with confidence fay, that nothing fhould be omitted that can or might probably tend to prevent or remove it.

As we find that all the fymptoms of this difeafe, as well as the confequences which enfue from it, are ufually fevere in proportion to the degree of inflammation which takes place, it ought to be our view, in every inftance, to prevent this from arriving at any great height. This is moft effectually done by blood-letting; a proper ufe of laxatives; opiates; the application of anodynes and aftringents to the parts

parts affected; preserving the body in a proper posture, and suspending the testicle.

Of all these remedies blood-letting is the most effectual and certain, particularly local blood-letting by the application of leeches. In plethoric patients, or where the swelling arrives at any considerable bulk, blood should be taken from the arm in such quantities as the strength will permit, while, at the same time, a number of leeches should be applied over the testis. But in weakly people, particularly where none of the symptoms are violent, the abstraction of blood by means of leeches alone will commonly prove sufficient.

The first application of leeches to a swelled testicle excites a good deal of uneasiness. They increase the irritability of the parts, and an increase of the tumour seems to be induced by them; but the discharge has seldom continued for the space of an hour or two till the pain abates, the tension, which before was considerable, becomes much less distressful, and the swelling even appears to lessen in bulk,

and in the courſe of the following day the patient can allow the parts which he could not previouſly bear to be touched, to be handled with freedom.

For the moſt part one application of leeches, if a proper number has been uſed, proves ſufficient; but when any of the ſymptoms ſtill continue ſevere, particularly when the ſwelling does not diminiſh, when the pain does not leſſen, and when the febrile ſymptoms do not abate, it becomes in ſome caſes neceſſary to repeat the application of leeches once and again. I think it here proper to remark, that we ſhould never heſitate in this ſituation to take blood with freedom. A conſtitution muſt be delicate indeed that will be injured even with repeated applications of leeches; and I am ſatisfied that very important advantages may be derived in all caſes of ſwelled teſtes from a timeous and proper uſe of them.

Abſtraction of blood by means of leeches is not only uſeful in ſhortening the duration of the inflammatory ſymptoms, but, in

in consequence of this, it proves serviceable in preventing two very distressful consequences which swelling of the testes is very apt to induce, viz. that swelled, indurated state of the epididymis which I have mentioned, and the most frequent variety of hydrocele, formed by serum collected in the tunica vaginalis. We have already had occasion to remark, that a permanent swelling of the epididymis is a very frequent effect of an inflamed testicle, and I have met with several well-marked instances of hydrocele proceeding from the same cause. That blood-letting in any way, whether general or local, will at all times prevent the accession of these symptoms I will not pretend to assert; but, from the result of much observation, I am convinced that it answers this purpose with more certainty than any other remedy that has yet been employed.

In many situations leeches cannot be procured; when this happens to be the case, nearly the same advantage may be derived from small punctures being made

on different parts of the ſwelling. The punctures ſhould be made with the point of a lancet, and if the ſcrotum be previouſly immerſed in warm water, nearly the ſame quantity of blood will be obtained from them as from the ſame number of leeches.

As ſwelling of the teſticle in Gonorrhœa ſeems in every inſtance to proceed from the irritation excited in the urethra, it is an object of the firſt importance to remove every cauſe that can in any degree tend to irritate either the urethra or contiguous parts. Hence, where coſtiveneſs prevails, gentle laxatives prove particularly uſeful. I have known different inſtances of hardened fœces collected in the rectum inducing ſwellings of the teſtes; and nothing tends more certainly than this to keep up the diſeaſe, by whatever cauſe it may at firſt have been induced. But although coſtiveneſs is to be guarded againſt, we are, for a ſimilar reaſon, to ſhun the oppoſite extreme. Strong purgatives always excite much irritation in the rectum, and are there-

therefore to be carefully avoided in Gonorrhœa. It must consist with the knowledge of every practitioner that they universally do harm. Where the bowels are moderately easy no medicines for this purpose can be required, but when they are not in this situation, castor oil, flowers of sulphur, cream of tartar, or any other gentle laxative, should be employed. Even these should be given in small doses, repeated at proper intervals, rather than that any risk should be incurred of exciting irritation in the rectum by their being exhibited in larger quantities.

With a view to lessen and remove the irritation and pain in the tumour with as much certainty and expedition as possible, opiates should be prescribed immediately on the pain becoming severe. When they can be avoided till one or more easy stools have been procured they prove most useful; but when much irritation prevails no regard should be paid to this. As the sickness and general uneasiness which sometimes occur from a swelled testis are evidently

evidently the effect of irritation, nothing proves so effectual in removing these symptoms as adequate doses of opiates; and at the same time that they remove this distress of the system by lessening the pain they also tend to carry off the swelling of the testicle. From an idea that opiates tend to increase the heat and other symptoms of fever, many practitioners are afraid of using them wherever fever takes place in any considerable degree; but much experience of their influence enables me to say, that they may be employed with much safety and advantage in every stage of swelled testis where the degree of pain is considerable.

This is so remarkably the case, that I have known instances of the hernia humoralis, as it is termed, being cured by opiates alone, which did not yield to the usual remedies. In whatever manner Gonorrhœa may act in exciting swelling of the testis, the tumour, when once produced, excites so much irritation, that, till this be lessened, the swelling for the most

part

part continues obſtinate. Next to blood-letting opiates prove the moſt effectual remedy for this purpoſe.

While the internal exhibition of opiates thus proves uſeful, advantage is often derived from applying them to the ſwelling itſelf. This may be done either by the application of ſoft pledgits, ſoaked in laudanum, or anodyne balſam, or by poultices made with a ſtrong decoction of poppy heads and crumb of bread.

All the ſaturnine applications prove uſeful here. When Goulard's extract, as it is termed, is employed, or what is nearly the ſame, the acetum lythargyrites, it ought to be in greater quantities than are uſed in other parts of the body; for the teſtes being protected by different coverings, remedies of this kind, when of the ordinary ſtrength, do not readily affect them. When ſaccharum ſaturni is employed, as it will not diſſolve in ſufficient quantity in water, if vinegar be not added, and as vinegar proves an uſeful application, even by itſelf,

ſelf, theſe two remedies ought always to be combined.

The ſteams of warm vinegar act as an uſeful diſcutient here. In applying them, the teſtes ſhould be properly ſuſpended over a veſſel in which boiling vinegar is contained; or the ſwelling may be fomented from time to time with flannel immerſed in warm vinegar, and ſo ſtrongly wrung, that nothing but ſteam remains upon it. Vinegar, in every form, acts with much advantage in this diſeaſe, and this gives a pleaſant variety in the way of applying it.

Whatever remedy is employed the body ſhould be kept as much as poſſible in a horizontal poſture, at the ſame time that the ſcrotum ſhould be properly ſuſpended. We find by experience that no remedy will prove effectual while the patient continues to walk about; while, in many inſtances, a horizontal poſture of itſelf, will have a conſiderable effect in removing the diſeaſe. In ſuſpending the ſcrotum, care ſhould

ſhould be taken to do it in ſuch a manner that the teſticle be completely ſupported, without being compreſſed. Preſſure, even in a ſlight degree, always does harm, and ought to be avoided.

We have already had occaſion to obſerve, that in Gonorrhœa a ſtoppage of the diſcharge often takes place on the firſt approach of a ſwelled teſtis. This leads to the idea of ſome advantage being to be derived from our exciting a return of the running; and there is not a doubt of this proving in ſome inſtances uſeful. The diſcharge from the urethra not only leſſens the inflammation in the part from whence it proceeds, but it has alſo an influence on the tumour of the teſtis. As it is now univerſally admitted that a return of the running does not act by drawing matter directly from the teſtis, ſome have ſuſpected that it never can prove uſeful. But why may not a diſcharge excited in the urethra act in a ſimilar manner in removing an inflammation of the teſtis, that we know from daily experience happens with ſetons

ſetons and other iſſues in the treatment of inflammatory affections of other parts? The fact indeed, is, that a plentiful return of the diſcharge very commonly relieves all the ſymptoms of this diſeaſe.

For the purpoſe of exciting a return of the running, bougies prove moſt effectual; but in affections of the teſtes they require to be managed with a delicacy not uſually obſerved in this branch of practice: for if more pain or irritation be produced than is neceſſary for the purpoſe, inſtead of acting as a remedy, they neceſſarily aggravate every ſymptom. In common practice, I think it better to truſt to the frequent application of warm emollients; ſuch as the immerſion of the penis in warm milk, or in decoctions of althea, or lintſeed; applying warm poultices over the penis, and injecting warm oil or milk into the urethra.

From the inſtantaneous manner in which ſwellings of the teſtes ſometimes ſucceed to a ſtoppage of the diſcharge in Gonorrhœa, and from their appearing, we are told,

told, in some instances, even to precede this stoppage of the running, some have doubted whether they are to be considered as the cause or effect *. That the testes may first inflame, and the running afterward stop, cannot be doubted. But although this may happen in a few instances, the very reverse is what we commonly meet with, insomuch that patients who have once been affected with swellings of the testes, are very apt to experience a return of the disease in every Gonorrhœa to which they may in future be liable, solely from the running being carried off in the usual way. I know several who, for this reason, dare not use even the mildest astringent injection; otherwise they are sure to have a swelling of the testis induced: while, in others, it swells at the termination of the running, whether injections have been used or not. In the course of my observation, therefore, no cause for doubt has occurred upon this subject.

* Vide John Hunter on the Venereal Disease.

By

By a proper application of the different remedies we have mentioned, ſwellings of the teſtes are for the moſt part ſoon relieved, and at laſt are carried off entirely, excepting that permanent hardneſs to which the epididymis, as we have ſeen, is particularly liable. But although this is the common event of the diſeaſe, yet inſtances are not wanting, moſt frequently indeed from the patient's miſconduct, of the whole body of the teſtis remaining ſwelled, and obſtinately reſiſting all thoſe remedies which uſually prove effectual. If, in this ſituation, ſome application be not made by which the ſize of the tumour is ſoon diminiſhed, and if it be allowed to remain ſtationary for any length of time, it is very apt to continue much enlarged, and ſometimes of a ſchirrous hardneſs during the life of the patient. I may alſo remark, that it is this ſtate of the diſeaſe which is moſt apt to terminate in hydrocele; or effuſion of ſerum into the tunica vaginalis teſtis, with which it is ſometimes attended.

In this ſituation mercury is commonly employed; and, in ſome inſtances, when given ſlowly, as an alterative, I have ſeen it prove uſeful; but it is doubtful whether a complete courſe of mercury ſhould ever be adviſed or not, for when it does not carry off the ſwelling, which ſeldom happens, it is apt to increaſe it, and to induce pain and irritation in the tumour when none exiſted in it before. Whenever mercury, therefore, is adviſed, it ought to be in ſuch quantities as cannot tend to quicken the circulation or excite fever. A decoction of mezereon has in ſome inſtances been given with advantage along with mercury *.

It is in this ſtate of a ſwelled teſtis, where the tumour does not yield, but remains nearly of the ſame ſize after the inflammation by which it was induced is gone, that emetics are moſt likely to prove uſeful. They have been uſed, I know, in all periods of the diſeaſe; but it is chiefly in the

* Vide Appendix, No. 45.

ſituation we are now ſpeaking of that I have ſeen them act with advantage. A ſmart emetic, carried a proper length, will ſometimes, in the ſpace of an hour or two, leſſen the bulk of a tumour which had for ſeveral weeks obſtinately reſiſted every other remedy. In ſome caſes one emetic proves ſufficient, while, in others, it requires to be repeated once and again. Mercurials were formerly uſed for this purpoſe. This was done from the diſeaſe being conſidered as a ſymptom of Lues Venerea, and for which mercury was known to be the only antidote. But we now know that tumours of the teſtes, which take place merely from Gonorrhœa, never partake of the Venereal Virus ; and accordingly emetics, of whatever nature they may be, prove equally uſeful here with mercurials, provided the ſhock which they give to the ſyſtem is equally conſiderable.

I have ſometimes, in this ſtate of a ſwelled teſticle, applied a bliſter with advantage. It might not perhaps be altogether ſafe to apply bliſters while the ſcrotum

continues

continues much inflamed; but when the external inflammation and tension subside, they may be advised with safety; and, in different instances, I have known them accomplish a reduction of the swelling of the testis, where other remedies had for some time been employed without any effect.

A due perseverance in the use of some or all of these remedies will seldom fail, where a swelling of the testicle is altogether inflammatory; but where it proceeds in a great measure from irritability, as we judge to be the case where the swelling comes and disappears suddenly, or where it comes and goes from one testicle to another, other remedies are, in this situation, found to prove more effectual.

Even in this variety of the disease blisters sometimes prove useful; and I have known the irritation removed, and the swelling carried off in the course of a short time by opiates; but these afford only a temporary relief, and do not prevent the disease from returning on the slightest

application of any of the exciting causes which usually tend to induce it.

The remedies which here prove most effectual are cold bathing, and a plentiful use of bark. Sea bathing, when the season permits, should in the first place be advised, but when this cannot be obtained, cold water may be used at home, with a proportion of common salt dissolved in it. It answers a good purpose whether the whole body be immersed in it, or merely the scrotum bathed in it; but, for the most part, I have thought that it proves most effectual when applied to the scrotum only. As bark and cold bathing act upon the same principle, that is, by giving tone and vigour to parts which we suppose to have been deprived of them, they may either be used together, or exhibited separately, as the patient may incline.

The testes, we find, are apt to decay. One of them will begin to lessen in bulk, and, in a gradual manner, will either disappear entirely, or leave only a thin mem-

branous

branous ſubſtance in its place. For the moſt part the other remains ſound; but I have known inſtances of both becoming affected at the ſame time, and others where the one remained entire as long as any part of that which was firſt affected was perceptible, but where it alſo began to decay as ſoon at the other was entirely deſtroyed.

This affection occurs at all periods of life, but moſt frequently after the 40th year. In many inſtances, no cauſe whatever can be aſſigned for it; but I have obſerved that it is moſt frequent in people of delicate conſtitutions, where the muſcles are ſoft and relaxed, and the complexion wan and ſallow. I have alſo found that thoſe in whom it occurs have, in almoſt every inſtance, been in early life particularly addicted to Onaniſm.

In a few caſes it has appeared as an evident conſequence of a ſwelled teſticle. On the fullneſs produced by the diſeaſe being removed, the proceſs of abſorption by which this was accompliſhed does not

ſtop, but goes on till the whole teſtis is carried off. In ſome inſtances this takes place while the teſticle continues to the laſt of its natural degree of firmneſs, or even while the hardneſs ſtill prevails which occurred during the ſtate of inflammation by which the ſwelling was at firſt induced: but, in others, before this waſting proceſs commences, the teſticle becomes ſoft and pulpy, or even diſſolves into a fluid. It is ſeldom attended with pain, the patient being, in many inſtances, ignorant of his loſs till one, or perhaps both, teſtes are nearly conſumed.

Hitherto no certain remedy has been diſcovered for putting a ſtop to this complaint. Mercury, hemlock, and electricity have been tried, but with no advantage. The cold bath has for a time ſeemed to prove uſeful, but the diſeaſe returned again, and both teſtes were diſſolved. In one caſe, where one of the teſtes was conſumed before the patient perceived it, and where the other was evidently affected, I applied a bliſter over it. This waſting

pro-

process ſtopped, and never recurred again. The patient is about 36 years of age. His inclination and powers of propagation, he ſays, are ſtill as ſtrong as they were before, and he has lately had a child.

SECTION VII.

Of Swellings of the Spermatic Cord.

THE Spermatic Cord is liable to ſwellings of different kinds, but it is ſuch only as proceed from Gonorrhœa that we are here to notice.

It ſometimes happens that inflammation of the teſticle ſpreads to the cord, and excites pain and tumefaction along the whole courſe of it. At other times the cord inflames without any previous affection of the teſtis. It becomes tenſe, hard, and painful. The ſwelling, for the moſt

 part,

part, is at firſt confined to the vas deferens, but at laſt the other parts of the cord ſuffer alſo.

I have met with ſome in which one or two tumified parts were perceived in the courſe of the cord, while the reſt of it remained ſound; but, in general, the cord is equally affected, from the teſtis along its whole courſe up the groin.

On the firſt approach of this diſeaſe, as it is always accompanied with pain and tenſion, with ſome inability to walk, the patient is induced to treat it with attention; but, where the ſwelling is not ſoon carried off, the pain will ſometimes abate, or even vaniſh altogether; and in this ſtate, where the tumour is not conſiderable, the patient is led to ſuppoſe that no harm can ariſe from it: by this neglect the ſwelling is often rendered ſo firm and hard that no remedies we can employ have any influence in removing it. In ſome caſes I have met with a hard ring, affecting the cord only at a particular ſpot, where the diſeaſed part was nearly

as

as firm as bone while the reſt of it was in a ſoft natural ſtate.

While the tumour is confined to one part of the cord I have ſeldom known it increaſe to any alarming degree, but whether it be circumſcribed, or extended over the whole length of the cord, no time ſhould be loſt in the application of remedies for removing it. Independent of other reaſons, if the vas deferens be chiefly affected, or even only compreſſed in its courſe, the teſticle will be rendered as certainly uſeleſs as if it were extirpated: even this, in ſome inſtances where one ſide only was affected, has appeared to render the patient impotent, and it will never fail to do ſo where the diſeaſe affects both ſides.

The remedies that prove moſt effectual here are blood-letting, bliſters, and ſuch others as are uſually employed with advantage in ſwellings of the teſtis. Theſe we need not particularly enumerate, as they were fully treated of in the laſt ſection; but it may be proper to remark that blood-

blood-letting proves chiefly uſeful on the firſt approach of the diſeaſe, and in this ſtate, when properly applied, that it ſeldom fails in removing it. It may, in ſome caſes, be neceſſary to take blood from the arm, but the local diſcharge of it by leeches applied to the part affected, is at all times to be more depended on.

Where the diſcharge of blood, however, does not ſoon leſſen the ſize and hardneſs of the tumour, we need not afterwards expect any advantage from it. In this caſe I have repeatedly known bliſters prove uſeful when applied along the courſe of the cord; but neither are they to be depended on if ſome effect be not ſoon perceived to reſult from them.

In partial affections of the cord a ſmall bliſter applied to the diſeaſed part, and the part kept open with ointment of cantharides, has tended to reduce the ſwelling.

Mercury is commonly employed here, and where the diſeaſe does not ſoon yield to blood-letting and bliſters, it is perhaps the

the only remedy from which any advantage is to be expected; but I have commonly found, where the swelling has been carried entirely off by mercury, that there has been much cause to imagine that the patient at the same time laboured under Lues Venerea. In some cases the disease has subsisted in an evident form of pox in other parts of the body, while, in others, there was only grounds for suspicion. In all of these the mercury seemed to operate with more certainty when a decoction of mezereon and sarsaparilla was conjoined with it.

Mercurial frictions prove more useful here than any other mode of giving the remedy, and the application of mercurial plasters to the swelled parts acts with more advantage in swellings of this kind than in any other in which I have employed them.

SECT-

SECTION VIII.

Of Swellings of the Lymphatic Veſſels of the Penis.

WE know, from the hiſtory of the Lymphatics, that they ſerve to inhale, and to carry into the general courſe of the circulation, not merely from the ſurface of the body, but from every other part of it, fluids applied to their open extremities. In this manner they remove from ſome parts what might prove hurtful if allowed to remain, and they carry into the conſtitution from others what is obviouſly meant for the nouriſhment and ſupport of it. But while this is their chief purpoſe, we alſo know that they carry into the ſyſtem what often tends to deſtroy it. They ſeem to have no power of rejecting what proves hurtful, hence they im-

imbibe poiſons, and the moſt inoffenſive articles, with equal readineſs. All our contagious diſeaſes are probably produced through the medium of the lymphatics, and we can prove by experiment that this is the caſe with many of them; particularly with the plague, the ſmall-pox, and Lues Venerea. So readily is the matter of theſe diſeaſes abſorbed by the lymphatics, that it can never with ſafety be applied to any part of the body; for ſo quickly does abſorption, in ſome inſtances take place, that we have frequent proofs of infection being carried into the conſtitution, even after much pains has been taken to waſh away the matter by which it was produced, in the ſpace of a minute or two after being applied to the ſurface of the body.

For the moſt part we find that the lymphatics themſelves do not immediately ſuffer by the abſorption even of the moſt noxious matter. They will convey the poiſon of a viper and other ſerpents to the courſe of the circulation, by which the animal will be killed in the ſpace of an hour,

hour, while no veſtige of its effects appears in the lymphatic veſſels themſelves. In like manner, the matter of Lues Venerea paſſes into the conſtitution from the penis, without any ſwelling or other mark of diſeaſe being perceived in the lymphatics through which it was conveyed.

This, we muſt allow, however, is not univerſally the caſe. Inſtances ſometimes happen of the matter of Lues Venerea paſſing through lymphatics that are hard and ſwelled, but we know from daily obſervation that it is not a frequent occurrence. We find, indeed, that the lymphatic veſſels in every part of the body are apt to ſwell and inflame on cauſes capable of exciting irritation being applied to them. Thus we often obſerve the lymphatics of the arm ſwell, become hard and painful from a prick in one of the fingers with a pin or a thorn, or even from a nail being cut too far into the fleſh; and in Gonorrhœa it is by no means uncommon to find a hard lymphatic paſſing along the back of the penis to the groin,

ariſing,

arising, in some instances, from the prepuce, and in others from the urethra. But although this, as we have observed, occurs also in some cases of Chancre, we meet with at least twenty instances of the contrary, for one in which this affection of the lymphatics takes place. I think, too, that I have observed, where the lymphatics proceeding from Chancres have inflamed, particularly where the inflammation has been considerable, that the constitution has not been so apt to suffer as where this did not happen. From all which, I would conclude, that inflammation of the lymphatics, instead of indicating an increased power of absorbing what is applied to them, as many have imagined, tends in a great measure to lessen, and, perhaps, to destroy it. Till the fact is farther ascertained, which experience and observation alone can do, it would be improper to place any dependence upon this in the treatment of Chancres. In all cases of Chancre, whether the lymphatics inflame or not, it would be imprudent to omit

omit whatever might tend to render the conſtitution ſafe; but finding that inflammation ſeems not only to leſſen the power of abſorption in the lymphatics, but that they inflame from cauſes in which we know that no infection exiſts, as often happens from a prick or a cut with a clean inſtrument, we would from this alone be led to think that this affection of theſe veſſels which occurs in Gonorrhœa, proceeds more from irritation than from any other cauſe. This idea, however, is farther confirmed by the proofs we have already adduced of Gonorrhœa being a local diſorder, as well as by our daily obſervation of the riſe and progreſs of theſe ſwellings which occur in this diſeaſe. They commence with all the uſual ſymptoms of inflammation. A hard ſtring, or cord, is perceived along the back of the penis. It is painful to the touch, and the teguments above it ſometimes acquire an eryſipelatous redneſs. The whole penis becomes ſtiff and uneaſy, and this renders erections particularly painful.

In

In a great proportion of cases the inflammation subsides quickly and easily, the stiffness and pain gradually abate, and the hardness of the lymphatic disappears entirely: but where the inflammation has either been severe from the first, or not properly treated, it proceeds in some cases to suppuration, forming one or more small abscesses in the course of the affected part. The sores, however, which ensue from these, heal readily, when the constitution is otherwise healthy, forming a very manifest difference between Gonorrhœa and Lues Venerea. Similar affections of the lymphatics which occur in the latter, requiring, for the most part, a course of mercury to remove them. I say for the most part only, from having met with more than one instance of the sores which occur in Lues Venerea from this cause healing without the use of mercury, and which has induced me to think, that even in this disease, the lymphatics may swell and inflame merely from the acrimony of the matter, and that this inflam-

mation may have ſome tendency, as I have obſerved above, to prevent the matter from paſſing into the conſtitution.

Where ſwellings of this kind in Gonorrhœa are confined to the lymphatic veſſels, I have commonly found that cold poultices, prepared with crumb of bread, and acetum lythargyrites, or ſaccharum ſaturni, prove more effectual than any other application. They remove the ſwelling and hardneſs, and leſſen the pain with more certainty than warm emollient poultices. But where the inflammation ſpreads over the penis, as it ſometimes does, it becomes neceſſary not only to diſcharge blood from the arm, but to apply leeches over the pained parts. This, with a low diet, and confining the patient to a horizontal poſture, very ſeldom fails in removing the diſeaſe. But it ſometimes happens, either from the neighbouring parts becoming ſeverely inflamed, or from the diſeaſed lymphatic burſting, that effuſions occur in the contiguous cellular ſubſtance, and ſmall abſceſſes forming, they at laſt diſcharge their con-

contents, and produce ſuch ſores as I have already had occaſion to mention.

The treatment of theſe ſhould be the ſame as that of ſores proceeding from any other cauſe in which the conſtitution is not affected. When their edges are hard and inflamed, emollient poultices will prove uſeful. For the removal of ſloughs and foulneſs, red precipitate, or even cauſtic, may be neceſſary; and for cicatriſing them nothing anſwers better than unguentum e calce zinci, or ceratum e lapide calaminare †.

In two different inſtances of hardened lymphatics in Gonorrhœa, beſides the firm cord on the back of the penis, a thin, flat, hard tumour, proceeding from this cord, ſpread round the whole ſubſtance of the penis, for the breadth of a quarter of an inch. One of them was contiguous to, and immediately behind the glans. The other was near to the pubes. This laſt paſſed round the urethra, which it graſped ſo firmly as to give cauſe to ſuſpect that

† Vide Appendix, N° xlvii. xlviii.

at laſt it might prove a total obſtruction to the urine. A courſe of mercury was tried in each of them, without any advantage. A ſmall piece of mercurial plaſter was then applied over the ſwelling, and this, with a gentle purgative of ſea-water every ſecond or third morning, was all that was adviſed. The ſwelling in each of them became conſiderably leſs, but never diſappeared entirely. It did not, however, gave any diſturbance afterwards.

SECTION IX.

Of Swellings of the Glands in the Groin.

THE ſwelling and inflammation of the lymphatics, deſcribed in the laſt ſection, frequently proceeds no farther than the root of the penis. At other times it goes the length of the groin, and affects one or more of the contiguous glands, which

which become hard, ſwelled, and inflamed, putting on many of the appearances of the venereal bubo.

At other times theſe glands ſwell and inflame, where no affection of the contiguous lymphatics is perceptible. But although in ſuch caſes no apparent inflammation occurs in theſe veſſels, there is, however, much cauſe to imagine, that in a certain degree it always takes place. There is not, at leaſt, any other obvious route by which the inflammation can be conveyed from the urethra to the glands in the groin.

In ſome caſes theſe ſwellings become large, and notwithſtanding our endeavours to prevent it, ſuppuration at laſt takes place: but, for the moſt part, if they be not neglected at firſt, they may be very eaſily diſcuſſed. In moſt inſtances this may be accompliſhed by the uſe of ſaturnine poultices alone; but where the pain and inflammation are ſevere, blood-letting, both general and local, becomes neceſſary. Laxatives always

prove uſeful, and a cooling, low regimen can ſeldom be diſpenſed with.

The moſt perplexing part of the ſurgeon's practice here is, to determine the real nature of the tumour; to aſcertain whether it proceeds merely from inflammation, or from the abſorption of venereal matter. If from the laſt, mercury alone will prove effectual; while no practitioner would conſider mercury as neceſſary for the removal of a ſwelling altogether inflammatory. Neither would it, in this caſe, anſwer any good purpoſe. It would not leſſen the ſize of the ſwelling: nay, by the fever which it ſometimes excites, it might even tend to increaſe it, and diſappointment to the practitioner, and much diſtreſs to the patient, would be the conſequence.

The circumſtances upon which we chiefly form our judgment here are theſe: If no chancre or excoriation has been perceived, either upon the glans or prepuce, and if the inflammation in Gonorrhœa

has

has been conſiderable, there will be cauſe to imagine that the tumour is not venereal. When treating of chancre and venereal bubo, we ſhall enter more fully into the conſideration of this; but at preſent I may obſerve, that buboes do not commonly occur without chancres going before them. I know, indeed, from various caſes which have fallen under my management, that, contrary to the general opinion, real venereal buboes ſometimes form without any previous chancre, or any external affection; but as it does not happen once in a hundred inſtances, we are ſufficiently warranted in conſidering the abſence of chancre as a reaſon for ſuppoſing that ſwellings of this kind are not venereal.

In ſuch ſwellings as occur from Gonorrhœa much pain and tenſion prevail, not merely in the diſeaſed glands, but over all the groin; and a general ſympathetic uneaſineſs ſpreads over the thighs, and under part of the abdomen. Even the teſtes and abdominal viſcera ſometimes ſuffer,

whereas, in the venereal bubo, it is commonly one gland only that is affected, and the contiguous parts ſeldom become uneaſy till the diſeaſe is far advanced; not, indeed, till the tumour has acquired ſuch a ſize as to excite pain ſolely by diſtenſion. The ſwelled gland, it is true, is painful from the firſt, and the pain becomes gradually more ſevere as the tumour increaſes; but the pain is chiefly confined to one part, and ſeldom ſpreads farther till the teguments are much ſtretched by the ſubſequent formation of matter. And, laſtly, when glands ſwelled from this cauſe burſt, the ſores which enſue have a very different appearance from thoſe produced by real venereal buboes. Their edges, inſtead of being hard and retorted, have more the appearance of ſores which occur from common abſceſſes, and they ſoon begin to heal, even when mercury is not employed, which the others, we may obſerve, ſeldom do.

This circumſtance of theſe ſores healing, whether mercury be uſed or not, is the

moſt

moſt deciſive characteriſtic of their true nature, and when any doubts of this are entertained, either from the ſwelling having taken place without a previous chancre, or from any other cauſe, we ought to delay the exhibition of mercury till their tendency to heal, or to degenerate into a worſe ſtate, be aſcertained.

If they put on a healing appearance, and gradually become leſs, there will be much cauſe to hope that a complete cure will be obtained, whether mercury be uſed or not; while, on the contrary, this remedy ſhould be immediately adviſed when the ſores become foul, and their edges hard; and particularly when, inſtead of healing, they extend to a greater ſize.

The progreſs of the ſwelling alſo affords a mark of diſcrimination. The venereal bubo proceeds more ſlowly to ſuppuration than the inflammatory ſwelling of which we now ſpeak, which moſt frequently, indeed, is eaſily diſcuſſed, and ſeldom arrives therefore at the ſtate of abſceſs; but when tumours of this deſcription do ſuppurate,

it

it commonly happens in the ſpace of a few days. I have known matter completely formed in them in three or four days from their firſt appearance; a circumſtance which perhaps never happens in glandular ſwellings produced by the matter of Lues Venerea.

SECTION X.

Of Excoriations of the Glans and Prepuce.

BY the acrimony of the matter in Gonorrhœa the Glans and Prepuce are ſometimes excoriated. A ſlight degree of inflammation takes place at firſt, either partially or over the whole parts, and this being ſucceeded by a diſcharge of matter, the ſkin at laſt becomes fretted, and on being examined with a glaſs, the matter is perceived to flow from an infinite number

ber of ſmall points, on the ſmalleſt preſſure being applied to them.

But, for the moſt part, this affection of the prepuce and glans takes place without any diſcharge from the urethra. In the courſe of a few days after connection with an infected woman, and without any ſymptom of Gonorrhœa, a ſenſation of heat is perceived over the whole prepuce and glans, which ſoon terminates in a diſcharge of matter very ſimilar to what comes from the urethra in Gonorrhœa. From this circumſtance, the diſeaſe has been termed Gonorrhœa Spuria. The matter indeed is ſo ſimilar to that of Gonorrhœa, that it is uſually ſome time before the patient can be convinced of its not coming from the urethra. It not only reſembles the matter of Gonorrhœa in colour and conſiſtence, but likewiſe in quantity. In ſome caſes, it is ſurpriſingly great, owing to the great extent of inflamed ſurface, in the numerous plies and doublings of the ſkin forming the prepuce.

In

In ſlight affections of this kind, the prepuce continues to move upon the glans as it does in health; but when the matter is either of itſelf particularly acrid, or allowed by want of attention to remain till it becomes ſo, the ſkin forming the prepuce becomes ſo much inflamed and ſwelled, that it cannot but with much difficulty be made to paſs backward and forward. In ſome caſes this becomes impoſſible. If this happens when the prepuce covers the glans and cannot be drawn back, a diſeaſe is thereby produced, which we term phymoſis; and when the ſwelling takes place when the prepuce is retracted and cannot be pulled over the glans, the diſeaſe is termed paraphymoſis. Of theſe affections we ſhall ſpeak more particularly in the enſuing ſections.

By many, this diſcharge of matter from the prepuce and glans has been judged to be venereal; that is, they have ſuppoſed it to be produced by the matter of Lues Venerea. They have therefore conceived it to be always connected with an affection of the con-

conſtitution, and have accordingly, in the method of cure, been chiefly directed by this opinion.

This opinion, however, is evidently not well founded. From much obſervation, I am convinced, that this diſcharge is of a local nature, and that it is no more capable of affecting the conſtitution than the matter of Gonorrhœa. I believe indeed that this is now very generally admitted; and that it is thoſe only who doubt of it, who, taking their information from books, have not paid that attention to the event of theſe affections, which in forming a judgment of them is abſolutely neceſſary. It will be univerſally found that the diſcharge may be more eaſily removed by remedies applied directly to the parts affected than by mercury, or any medicine given internally. Indeed, no advantage is derived from the internal exhibition of medicines, while the diſeaſe ſeldom reſiſts the application of an aſtringent waſh: neither is the conſtitution

ever

ever affected with pox from excoriations proceeding merely from Gonorrhœa.

It is true that buboes and ſymptoms of pox ſometimes occur where the prepuce and glans have been previouſly affected in this manner. Of this I have ſeen many inſtances: but in all of theſe it has happened, that on inquiry, the patients were found to have had connection with diſeaſed women during the continuance of the excoriation; and whatever may be the opinion of ſome individuals upon this point, I believe few will doubt of an ulcerated or excoriated ſurface being particularly favourable for promoting the abſorption of any matter that is applied to it; inſomuch, that it is the univerſal remark of patients, that they never eſcape being poxed, if in ſuch circumſtances they have connection with women that are infected.

It is worthy of remark, that a ſmall, partial excoriation is always at firſt of a ſuſpicious nature, while from any obſervation I have been

been able to make, every general affection of this nature, where the excoriation extends over the whole prepuce and glans, terminates easily without producing any constitutional taint. The disease sometimes at first, indeed, occupies a small spot, and afterwards extends gradually over the contiguous parts, and where, by the event, we judge of its being of the most innocent nature from no disease of the constitution being produced by it. But I have uniformly found, where a small part only has remained for some time raw and excoriated, without extending to the surrounding parts, that symptoms of pox succeed to it with as much certainty as they ever do to chancres. I therefore believe, that all partial affections of this kind, which remain for more than a day or two circumscribed, are produced by the matter of Lues Venerea, and that they ought accordingly to be treated as symptoms of that disease. Besides the other differences which we have elsewhere enumerated between the matter of Lues Venerea and Gonor-

Gonorrhœa Virulenta, it would appear that in this they differ in the moſt obvious manner. The matter of Lues Venerea, however diffuſible it may be when received into the ſyſtem, from which indeed it is never expelled but with the aſſiſtance of mercury, is always ſlow in its progreſs while only locally applied either to the penis or any other part. Neither can it be applied, as we have already had occaſion to remark, to the ſmalleſt point, without much riſk of pox being produced by it: whereas, the matter of Gonorrhœa, whether it be applied to the urethra, to the glans, or prepuce, ſpreads quickly over all the contiguous parts; while it is obvious to daily obſervation, either that it is not abſorbed, or if it be taken into the ſyſtem, that no conſtitutional diſeaſe enſues from it.

Excoriations of this kind not only reſemble Gonorrhœa, in being produced by the ſame matter, and in being entirely local, but in the method of cure. We have already had occaſion to ſee, that the diſ-

charge

charge in Gonorrhœa cannot be certainly removed, but by the uſe of aſtringent injections. In like manner, bathing the parts affected in aſtringent ſolutions proves the moſt effectual practice here. Lime-water anſwers particularly well for this purpoſe: alſo ſolutions of saccharum ſaturni, and of white vitriol: immerſing the parts in brandy, or in a ſtrong infuſions of red-roſe leaves, will ſometimes remove the diſcharge on the firſt application. It is proper, however, to remark, that the more frequently remedies of this kind are applied, the more effectual they prove. They ſhould be uſed at leaſt five or ſix times daily, and for the ſpace of a few minutes at each application.

Emollient ointments are frequently employed in affections of this kind, but the very cauſe which renders aſtringents uſeful makes every application of this nature improper. They conſtantly increaſe the diſcharge, while no advantage of any kind accrues from them.

Neither do we find that purgatives, or any of the cooling medicines ufually prefcribed here are of any real utility. When much inflammation takes place, they may, in fome inftances, prove ufeful, but in all fuch cafes blood-letting is more to be depended on; particularly the application of leeches to the parts immediately affected, which, in all local inflammatory complaints, is to be confidered as the moft effectual remedy.

It has been objected to the application of leeches in excoriations of the penis, that the wounds from the bites of thefe animals are apt to degenerate into venereal fores. This proceeded upon the idea of all fuch affections being produced by the matter of Lues Venerea; but now when we know that this is by no means the cafe, it is obvious that the opinion muft be ill founded; and from various and repeated trials of the remedy in queftion I can decidedly fay that it is fo.

But admitting that a cafe fhould occur, in

in which it might be doubtful whether the excoriation and ſwelling was truly venereal or not, ſtill I would not heſitate in adviſing the application of leeches: they would prove more effectual than any other remedy in carrying off the inflammatory ſymptoms, while their bites, if they ſhould put on the appearance of venereal ſores, would immediately render the nature of the diſeaſe certain, which otherwiſe might long have remained in doubt.

In all ſores and inflammatory affections of theſe parts, the poſture of the body and poſition of the penis are circumſtances requiring particular attention. The patient ſhould be kept as much as poſſible in a horizontal poſture; and the penis ſhould be elevated ſo as to prevent the glans from hanging pendulous. It often happens indeed, where this is omitted, that ſwellings remain obſtinate for many weeks together, which otherwiſe might have been carried off in a few days.

SECTION XI.

Of Excoriations in the Parts of Generation of Women.

THE parts of Generation in Women are liable to excoriations of a ſimilar nature with thoſe enumerated in the laſt ſection. In ſome caſes they are confined to the clitoris, nymphæ, and labia pudendi. In others they ſpread to the perineum, and even to the groins and thighs, where, from negligence and want of attention to cleanlineſs, I have known deep and very extenſive ulcers produced.

Where the excoriations are confined within the parts of generation, the ſymptoms are nearly ſuch as occur from Gonorrhœa in the uſual form of the diſeaſe; but

but where the inflammation and rawneſs ſpread to the thighs, a great deal of diſtreſs is experienced in walking, and in every motion of the body.

The method of cure is nearly the ſame in women as in men. Bathing the parts frequently with one or other of the aſtringent applications mentioned in the laſt ſection, for the moſt part, proves effectual; for the excoriated parts ſeldom lie ſo deep as to require the uſe of the ſyringe; but when the parts become evidently ulcerated, bathing alone is not ſufficient. In this caſe the ulcers fall to be treated in the ſame manner with ſores proceeding from any other cauſe. When they are foul and ſloughy, an ointment ſtrongly impregnated with mercur. precipit. rub. is perhaps the beſt application we can uſe; and for the purpoſe of healing them, nothing anſwers better than common cerate, with a large proportion of lapis calaminaris, or unguentum e calce zinci, for which preſcriptions are given in the Appendix.

When ſores of this deſcription do not ſoon yield to theſe applications, and eſpecially when they ſpread and become deeper while the patient is uſing them, there will be ſome cauſe to ſuſpect that a venereal taint exiſts in the conſtitution: in which caſe a courſe of mercury ſhould immediately be adviſed, being the only remedy upon which, in ſuch circumſtances, we can place any dependence.

SECTION XII.

Of the Phymosis and Paraphymosis.

IN ſection tenth we found it neceſſary to give a definition of theſe two diſeaſes. Inflammation of the preputium always excites ſome degree of thickneſs and contraction. When the contraction occurs while the prepuce covers the glans,

glans, and in ſuch a degree as to prevent it from being pulled back, the diſeaſe thus produced, is termed phymoſis. We ſay that paraphymoſis takes place when the prepuce contracts behind the glans and cannot be drawn over it.

One of the moſt frequent cauſes of phymoſis is chancres on the preputium. The thickening of the ſkin induced by chancres, and the inflammation with which they are apt to be attended, is often productive of phymoſis; but it alſo occurs from other cauſes. Whatever excites much inflammation of the penis will induce it. Hence it readily occurs in every caſe of Gonorrhœa attended with any unuſual degree of inflammation, particularly in that variety of the diſeaſe where the glans and prepuce are inflamed and excoriated. But although theſe excoriations often terminate in phymoſis, it is certain that they are more frequently productive of paraphymoſis. The patient, in clearing away the matter, neceſſarily draws back the preputium, and when the parts

are previoufly much inflamed and thickened they are apt to contract fo fuddenly when in this ftate of retraction, that they cannot again be drawn over the glans.

In the treatment of phymofis, we are often fuccefsful by a proper application of emollients. No effect will refult from them when the ftricture has been of long duration; but, unlefs the inflammation is unufually fevere, they will often anfwer if duly perfevered in from the firft. Immerfing the penis, from time to time, in warm milk, or in a decoction of althea root, or of lintfeed, is perhaps the moft effectual method of applying remedies of this kind; and when much matter is produced between the prepuce and glans, either by chancres or inflammation, thefe liquids fhould be injected from time to time with a fyringe. But with a view to leffen the difcharge, after wafhing out any matter that may be formed, a weak faturnine folution fhould be injected three or four times a-day. This, with a low diet,

ab-

abstinence from exercise, and suspending the penis, will, for the most part, prove successful: but when the parts are much inflamed, it becomes necessary to take blood in quantities proportioned to the symptoms, not merely from the arm, but from the penis itself, by the application of leeches, which may always be done with safety where the disease is local, as we have shown to be the case where it proceeds from excoriation or from Gonorrhœa: but when it occurs from chancres, as venereal sores are apt to ensue from the bites of leeches, it is better to omit them.

While any considerable degree of stricture remains, it is always improper to force the prepuce back. This, however, is often done, but it very commonly terminates in paraphymosis; for when the parts are much contracted it is almost impossible to get the prepuce again brought over the glans, if it has once been forced completely behind it. It is better, therefore, to wait till the stricture is entirely removed,

before any attempt is made for this purpose. Besides the risk of inducing paraphymosis, the irritation which it gives tends always to render the stricture more obstinate. When the inflammation is altogether gone, it may be proper, after immersing the penis in any of the emollients above-mentioned, and rubbing it gently over with warm oil, to endeavour, from time to time, to stretch it to its usual extent; but even at this period of the disease the prepuce ought never to be pushed back with such force as can excite any kind of uneasiness.

In the treatment of phymosis it is proper to remark, that, in a great proportion of cases, the stricture can never be altogether removed. In slight degrees of it we commonly succeed by the means I have mentioned, but whenever it is severe the parts remain under some degree of contraction, for the most part, during the life of the patient. We have it indeed in our power to remove even the most inveterate stricture that occurs, by laying the prepuce

puce open, either by a partial incision, or cutting it from one end to the other, according to the extent of the disease, but this is a remedy of too severe a nature for the removal of phymosis, in the ordinary form of the disease. Where the prepuce is so much contracted as to interrupt the passage of urine, or to impede coition, it no doubt becomes proper to lessen or remove the stricture, but it is most frequently for obtaining ready access to concealed chancres that we advise this measure of laying the prepuce freely open.

Even chancres are often cured while the prepuce remains contracted; but this is only the slighter kinds of them. Whenever they are either deep or very extensive, although with much care and attention they may in some instances be cured, yet we are much more certain of effecting our purpose, and of doing it speedily, by laying the sores compleatly open. I am clearly of opinion, however, that a patient should rather submit to an ordinary or slight degree of phymosis, where there is

no

no diseafe concealed by it, than incur the pain and diftrefs which muft always enfue from this operation. Many have it from their birth, and are not fenfible of any inconvenience arifing from it.

It happens, indeed, in fome inftances, even of this natural phymofis, if we may fo term it, that we are under the neceffity of removing the ftricture by an incifion. This is particularly the cafe where the exfudation natural to thefe parts is in fuch quantities as to excite irritation, which it is always apt to do when it adheres to the prepuce and glans. By much pains in wafhing with a fyringe, the parts may be kept fo clean as to prevent them from fuffering with this mucus; but in general we find it neceffary either to lay the contracted prepuce open from one end to the other, or to remove a portion of it entirely, fo as to perform the operation of circumcifion.

It may be proper to obferve, that although this operation of removing a portion of the prepuce is in itfelf exceedingly fimple

simple and easy, and never fails to answer the purpose where the parts are perfectly sound, that it is very apt to disappoint us entirely, when they are under any degree of inflammation or irritation. In this situation, although the parts in which the stricture is seated be completely removed, the remaining extremity of the prepuce contracts almost immediately after the operation, so as to create nearly the same degree of inconveniency which it did before. By the introduction of dosils of lint, sponge tent, and other such articles, we may for a time prevent the contraction from becoming considerable, but the irritation which these applications excite at last oblige us to lay them aside, when the stricture soon takes place in a degree equal to what it was before the operation.

I have taken the more particular notice of this from different cases having fallen under my management, in which, by endeavouring to remove a contraction of the prepuce by the operation of circumcision, we were completely disappointed. In three

of

of theſe the operation was done by others. In one I performed it myſelf. But although every thing was done in all of them that might probably render them ſucceſsful, yet they all failed, and after a conſiderable time ſpent in trying to dilate the newly-formed ſtricture, I was in two of theſe inſtances obliged to perform the operation for the phymoſis in the uſual way, by making a longitudinal cut through all the remaining part of the preputium. In one the ſtricture was not ſo conſiderable as to render it neceſſary, and in the other the patient would not ſubmit to it.

Were we to remove the prepuce entirely, by diſſecting it completely away from that part of the penis where it begins to be formed by an elongation or production of the ſkin, the operation might probably anſwer our expectation, but it would leave the glans altogether uncovered, which in thoſe who have been accuſtomed to have it protected with the prepuce, is apt to excite very diſagreeable ſenſations. Neither can I determine with certainty whether it

would,

would, in every case, answer the purpose of giving complete relief or not. Where the parts are previously in a state of irritation, the remaining skin might contract behind the glans, so as to produce some degree of paraphymosis: at least, in one of the four cases to which I allude, a very considerable portion of the prepuce was removed, and yet the remainder contracted in such a manner as to form a stricture which gave much distress.

Different methods have been proposed for performing the operation of a phymosis. For these the writers on chirurgical operations must be consulted, but the easiest, and perhaps the simplest of any, is that which I have described in the system of surgery †, in which the incision is made by passing a sharp pointed bistoury along a directory between the prepuce and glans, and having pushed the point of the bistoury through the prepuce near to where it begins to form, the cut is completed by drawing the instrument forward; in which

† Chapter X. Section 1.

man-

manner it is done, not only more neatly, but with more expedition, and with much more eaſe to the patient than in the uſual way of cutting the prepuce from before backwards. In this manner the inciſion is always made at different ſtrokes, by which the cut is apt to be ragged and unequal, whereas in the other it is done at once, and in any direction that the operator may incline.

Some adviſe the inciſion to run on the ſide of the penis, and others along the back of it. The difference in general is not material, but the former appears to me to be preferable, from the matter either of the cut itſelf, or of concealed chancres not being ſo apt to lodge between the prepuce and glans, as when the inciſion is made on the back of the penis. It is proper, however, to obſerve, that there are two circumſtances, which in this operation require particular attention: the large veins of the penis ſhould be avoided, and when chancres are preſent, the cut ought to run as near to them as with propriety it can

be

be made, ſo as to admit of the eaſy application of proper dreſſings.

In the treatment of the parts after the operation, ſome attention is neceſſary to prevent the edges of the divided prepuce from adhering to the glans. I have known a good deal of inconvenience produced by this being overlooked, and it is eaſily prevented by inſerting a ſmall pledgit of lint between the prepuce and glans at each dreſſing.

Paraphymoſis may happen either from a ſtricture of the prepuce, from a ſwelled ſtate of the glans penis, or from a combination of both.

When it appears to depend, either altogether or chiefly, on a contracted ſtate of the preputium, the ſame applications ſhould be made to it which we adviſed for the phymoſis. By the uſe of warm emollients the ſtricture, when in a ſlight degree, may be ſo far removed as to admit of the prepuce being drawn over it. After immerſing the penis for a few minutes in warm milk, and rubbing the contracted parts with any emollient ointment, we

may ſometimes ſucceed by applying the fore and middle finger of each hand behind the contracted part of the prepuce, and pulling it gently forward, while, with the thumb of each hand placed upon the glans, we puſh it firmly backward. This I have done in different inſtances, which otherwiſe would ſoon have ended in ſtrictures of the moſt confirmed kind. It muſt, however, be confeſſed, that it is only in the commencement of the diſeaſe that this, or any other manœuvre of a ſimilar kind, will ſucceed; and there is no room for any ſuch attempt when the diſeaſe proceeds from a tumefied ſtate of the glans.

When thediſeaſe ſeems either to be entirely owing to an enlarged ſtate of the glans, or partly to this and partly to a ſtricture of the prepuce, as ſometimes happens, we may endeavour to relax the preputium by rubbing it with oil, or an emollient ointment; but in ſuch circumſtances it is evident that the application of emollients to the glans would rather do harm. By relaxing the parts affected they would increaſe

crease the swelling. Cold astringent applications prove more useful, and ought alone to be depended on. In this view we advise cloths dipped in brandy, vinegar, and cold water, to be applied to the parts, and poultices, with crumb of bread, and a solution of saccharum saturni in vinegar and water. But when these do not soon succeed in reducing the swelling, we are under the necessity of removing the stricture by an operation, in order to prevent the accession of more serious symptoms. When too long neglected the glans is apt to mortify, by the contraction of the prepuce putting a stop to the circulation of the blood.

This operation consists in making one or more incisions into the contracted edge of the prepuce. We sometimes succeed by making two or three small cuts in different parts of the stricture with the shoulder of a lancet. They ought to be carried entirely through the skin and into the cellular substance, and when they bleed freely they commonly give immediate relief;

but it muſt be admitted that theſe ſmall inciſions, however numerous they may be, do not prove ſo certainly effectual as one free cut made completely through the ſtricture. The eaſieſt method of doing this is, by inſinuating the end of a director beneath the ſtricture, aud cutting upon it with a ſcalpel. For this purpoſe a ſhort director ſhould be uſed, with the groove open at the extremity.

The inciſion here does not require any particular attention. The divided veſſels ſhould be allowed to bleed freely. This generally leſſens the pain, while it co-operates along with the removal of the ſtricture in carrying off the ſwelling. Lint, ſpread with unguentum ſaturnium, makes the beſt dreſſing for the ſore.

It muſt be remembered that we are now ſuppoſing that no diſeaſe exiſts in the conſtitution. When either of theſe affections are conjoined with Lues Venerea, as we often find to be the caſe, the patient cannot be rendered ſafe, nor will the ſores produced by the operation heal without the aſſiſtance of a courſe of mercury.

SECTION XIII.

Of Warts on the Glans and Prepuce, and Labia Pudendi.

THE Glans, Prepuce, and Labia Pudendi, are frequently attacked with warty excrefcences, on the termination of Gonorrhœa. They fometimes appear during the continuance of the difcharge, but more commonly at the end of it, when the patient having confidered the cure as complete, is furprized with the appearance of this new fymptom.

They rife at firft in the form of fmall points, which gradually become larger, and frequently fo numerous as to cover a confiderable part of the penis. In men they commonly begin immediately behind the glans, and extend, in the form of a

 ring,

ring, round the whole penis, near to the junction of the glans and prepuce. They afterwards appear indiscriminately on all the neighbouring parts, but they are usually most numerous upon the prepuce.

In some cases they are first perceived in the urethra. The patient complains of an obstruction to the flow of urine, and on separating the lips of the urethra, a red, florid excrescence is observed to be the cause of it. I have also met with productions of this kind in the urethra of women.

These warts are seldom painful; never, unless they proceed to a state of ulceration, which, when they do, is always to be considered as the fault of the patient. On their first appearance they are always firm and entire, but when they become numerous, if they be not regularly cleaned, the moisture natural to these parts becomes acrid, and renders them tender; and this, if it be not prevented by timeous assistance, soon terminates in painful ulcers. Excrescences of this kind assume various forms. For the most part they are single, and

and pendulous, with narrow necks, but in ſome inſtances they have broad baſes; while, in others, a number of theſe ſmaller warts ſprout all from the ſame root, and form excreſcences of unequal cauliflower kind of ſurfaces. When long neglected, as ſometimes happens with poor people, they acquire ſuch a bulk as to cover the glans entirely; and when in this ſtate they become ulcerated, the whole maſs aſſumes ſuch a diſeaſed appearance, as with thoſe not accuſtomed to this branch of buſineſs, gives a ſuſpicion of their being cancerous. Of this I have met with different inſtances, where the penis, after being doomed to amputation, has been ſaved, and the warty excreſcences removed.

It is difficult, or perhaps impoſſible, to aſcertain the cauſe of theſe warts. In ſome caſes they are obviouſly produced from the cuticle, their attachment being ſo ſlight, that on being removed, the cutis vera is left entire: in others they proceed from the ſkin itſelf, but I never obſerved them to go deeper than this.

Whatever tends to excite the flow of an unuſual quantity of blood to the penis, ſeems to create a diſpoſition in theſe parts to formations of this kind: hence they ſucceed to various kinds of irritation. We know that they are a frequent conſequence of the venereal irritation, for they often ſucceed to chancres; and I have known them in different inſtances ſucceed to ſimple excoriation, where neither Gonorrhœa nor Lues Venerea ever exiſted. By whatever cauſe irritation is produced in the prepuce and glans, it ſeems to excite a diſpoſition in the ſmall blood veſſels of the parts to ſprout or pullulate, by which theſe warty productions appear to be formed.

As warts are a frequent conſequence of chancres, they have been always conſidered as of a venereal nature, whether they are the immediate effects of chancre, Gonorrhœa, or any other cauſe. This opinion, however, is by no means well founded. Warts on theſe parts may, no doubt occur, while Lues Venerea exiſts in the con-

conſtitution; and in ſuch inſtances mercury muſt be given before a permanent cure can be expected. But in a great proportion of caſes, at leaſt in ninety-nine of a hundred, they appear to be entirely local, inſomuch that remedies acting only upon the conſtitution have no influence whatever in removing them, while they are, for the moſt part, eaſily carried off by a variety of applications, which act ſolely upon the excreſcences themſelves, or rather upon the veſſels by which they are produced. Nay, they are ſo evidently of a local nature, that when they occur in Lues Venerea, although they are very apt to return when removed while the infection exiſts in the conſtitution, yet it is very certain that this diſeaſe of the habit may be completely eradicated without any effect being produced upon them. The warts which ſucceed to chancres commonly remain equally firm and obſtinate after mercury has been given as they were before, and are to be removed by the ſame means as if the conſtitution had never been affected.

ed. This, I may obſerve, is a point which in a particular manner merits the attention of practitioners; I mean of ſuch as are not daily verſant in this branch of buſineſs; for while the opinion is retained, as is ſtill the caſe with ſome, of warts on theſe parts being in moſt inſtances connected with Lues Venerea, much miſchief is apt to be done by a great deal of mercury being given where no advantage can ever be derived from it. In the treatment of this affection, I have known the conſtitution almoſt ruined by one courſe of mercury after another, without any effect upon the warts, and which were afterwards eaſily and ſpeedily removed by remedies applied directly to the parts themſelves.

I have mentioned irritation as a cauſe of theſe excreſcences, but it is only the ſlighter kinds of it that ſeems to produce them. They often ſucceed to a ſlight degree of inflammation, but I have never known them form on parts highly inflamed: on the contrary, much inflammation ſeems to deſtroy the tendency in

theſe

these parts to the production of warts, insomuch, that our most effectual remedies in the cure of these excrescences, and for preventing a return of them, are such as always excite a good deal of pain and inflammation. They may no doubt be removed more quickly with a scalpel or scissars, or by tying ligatures of waxed silk round them, when they are pendulous, and have narrow necks, but they are more apt to return when removed in this manner, or even when they are destroyed with caustic, unless some degree of inflammation has at the same time been induced upon the parts. Besides, ligatures cannot be applied to warts with a broad base, which they frequently have; and few patients will submit to the use of the scalpel for the extirpation of the numerous warts, which in such instances for the most part prevail.

Inflammation for the purpose of removing warts might be excited in various ways; but we necessarily prefer that which is easiest to the patient, and which at the

same

ſame time proves effectual. We ſometimes ſucceed by bathing the warts and contiguous parts three or four times a-day with a ſtrong ſolution of crude ſal ammoniac, or of corroſive ſublimate. And a ſolution of mercury in ſpirit of nitre at the ſame time that it acts upon the warts themſelves as a cauſtic, ſeems alſo, by exciting inflammation in the veſſels of the contiguous parts, to remove or deſtroy the diſpoſition which firſt produced them. Preſcriptions are given for theſe ſolutions in the Appendix, Nos. 39, 40, and 41. The two former may be uſed with freedom, but the ſtrength of the latter renders it neceſſary to apply it with much delicacy and attention. The parts ſhould be merely moiſtened with a pencil dipped in it, nor ſhould this be repeated above once every ſecond or third day.

Tincture of cantharides, applied in this manner, ſometimes anſwers; but we find by experience, that our ſucceſs is more certain from the application of ſuch powders as irritate and inflame the ſkin, than from

from the uſe of the ſame remedies in a liquid form. Savine in fine powder is one of the beſt for common uſe. Common muſtard, whether of the white or black kind, likewiſe anſwers; and I have known the powder of betony, and of white hellebore, both ſeparately, and mixed in equal quantities, prove ſucceſsful.

If the warts and ſkin lying between them be ſprinkled over with any of theſe daily, a ſufficient degree of inflammation is, for the moſt part, ſoon induced, and we know that it has gone far enough when ſome of the ſmalleſt begin to ſhrivel and drop off. At this time we ought therefore to deſiſt from any farther uſe of the powder, always taking care to renew it from time to time, if the inflammation ſubſides before the excreſcences are entirely removed. In a few inſtances, the warts ſprout up again after they were altogether carried off. When this takes place, the powder ſhould again be applied over the whole ſeat of the diſeaſe, and continued till ſuch a degree of inflammation is induced as the

the patient can eafily bear. They will feldom or never return again, if the parts at this fecond application of the remedy have been made to inflame fufficiently.

Thefe powders, even in a fimple unmixed ftate, very feldom fail, but in fome patients the warts are fo firm, and the fkin of the prepuce fo thick and corrugated, that powders of a more powerfully irritating nature become neceffary. In fuch cafes a fmall proportion of red precipitate, finely levigated, being added to the pulvis fabinæ, commonly anfwers. Calomel fometimes proves effectual, whether ufed by itfelf, or mixed with any of thefe powders, and a powder compofed of equal parts of alumen uftum and mercur. precip. ruber, feldom fails.

Even when warts are feated in the entrance of the urethra, they may be treated in this manner, at leaft I have often removed them in this fituation by the application of thefe powders, and I never knew any harm produced by them. In one

one inſtance when the wart was farther up the urethra than uſual, the excreſcence was completely removed by the pulvis ſabinæ alone, but a conſiderable degree of pain was induced by it, which ended in a very copious puriform diſcharge. The urethra became tender and inflamed, through the whole length of it, and the running having all the appearance of the matter of Gonorrhœa, I ſuſpected that a new infection had been communicated. My patient, however, aſſured me that this could not poſſibly be the caſe, as he had not for many months had any connection with women, and there was no cauſe to doubt his aſſertion. The running continued for the ſpace of two or three weeks, with all the ſymptoms of a common clap, and was cured preciſely in the ſame manner, viz. by the uſe of aſtringent injections.

SECT.

SECTION XIV.

Of Gonorrhœa Simplex.

I Have endeavoured in different parts of this work to ſhew that the diſcharge in Gonorrhœa Virulenta is the effect of inflammation excited in the urethra and contiguous parts by the matter of infection being applied to them. In the end of the preceding ſection a caſe is mentioned, in which ſymptoms occurred exactly ſimilar to thoſe produced by Gonorrhœa Virulenta from the application of an irritating powder to the urethra; and there is reaſon to ſuppoſe that they may at any time be induced by whatever excites inflammation in any part of that membrane. A puriform diſcharge from the urethra induced in this manner, and without any con-

connection with an infected perſon having taken place, may be denominated Gonorrhœa Simplex.

We have already had occaſion to ſee that a diſcharge frequently occurs in females, uſually termed fluor albus, which, in particular circumſtances, very much reſembles Gonorrhœa Virulenta †.

In men, we often meet with a diſeaſe exactly ſimilar to this; where a copious diſcharge of matter takes place from the urethra, attended with a ſcalding heat in voiding urine, and all the other ſymptoms of Gonorrhœa, and where there is no ſuſpicion of infection being communicated.

There is nothing more neceſſary than for practitioners to be aware of this, particularly for the younger part of the profeſſion, who are apt to ſuppoſe that every diſcharge of matter from the genitals, eſpecially in men, ought to be conſidered as venereal. But although this is undoubt-

† Vide chapter ii. ſection 10.

edly true in a great proportion of caſes, yet every practitioner of experience muſt have met with many inſtances of the reverſe, and in which the reputation of the moſt virtuous people might have been ruined, were the diſtinction of which we are now ſpeaking overlooked. I have met with different inſtances of men newly married being ſeized with this ſymptom, in ſome of which, although there was at firſt ſight much cauſe for ſuſpicion and anxiety on the part of the huſband, yet on being informed by a perſon on whoſe judgment they placed confidence, that a running of this kind is not unfrequently induced by other cauſes, and that the diſcharge which had newly taken place, would probably ſhew, by its ending more quickly than Gonorrhœa Virulenta uſually does, that it was of a different nature, they ſoon became leſs anxious, and at laſt were convinced of their fears having been altogether groundleſs.

In like manner, I have in different inſtances been conſulted by women, who,

on

on finding their husband's linen stained with matter, have fancied that they themselves had been injured by them; and the imagination being once affected, we all know how difficult it is in such matters to set it right. I was some time ago consulted by a lady in circumstances of this kind, who, from the cause I have mentioned, had long been reduced to a state of the greatest distress and misery. Her mind was in the first place deeply affected with the supposed misconduct of her husband; and she was fully convinced that she herself laboured under almost every symptom which attends the venereal disease. To this she was in a great measure led, by the opinion of a midwife, who unfortunately informed her, that from much experience in matters of this kind, she was convinced that she was poxed, and desired her to apply to me. Instead of this, she put herself under the care of one at a distance from town, where she resided, and who, from not having much experience in matters of this kind, was easily induced to believe that symptoms took

place which did not exift but in the imagination of the patient. There was no external mark of difeafe, but fhe complained of pains in her bones; fevere pains in the parts of generation and loins; uneafinefs in the nofe, throat, &c. In fhort, fhe had perufed a modern treatife on the Lues Venerea, by which fhe had become acquainted with the fymptoms of that difeafe, almoft all of which fhe now imagined that fhe laboured under.

A complete courfe of mercury, befides a variety of other medicines, were given in the country, but no advantage being derived from them, the patient came under my care. It appeared at once that fhe was difeafed in imagination only, for I did not find, on the moft minute inquiry, that any fymptom of the Lues Venerea had exifted from the firft. She acknowledged, that at different times, both before and after marriage, fhe had been much diftreffed with fluor albus; but this was the only difeafe of which fhe ever complained;

ed; and it never was of long continuance.

I endeavoured to convince her that ſhe was perfectly ſound, that ſhe never had the diſeaſe, and that the matter which ſhe had ſeen on her huſband's linen, and which was the only foundation of her ſuſpicion, was either produced by his connection with her while ſhe was diſtreſſed with fluor albus, or by ſome other cauſe of a nature equally innocent. All this, however, would have proved ineffectual, but I luckily had an argument in my power which brought conviction along with it, and which, in the courſe of a few days, made all her ſymptoms vaniſh, which otherwiſe might have been of the moſt permanent nature. At the very time when ſhe ſuſpected her huſband to have given her the infection, he had conſulted me by letters, which I preſerved, in which he expreſſed his aſtoniſhment at the ſudden appearance of a diſcharge of matter from the urethra, accompanied with heat and uneaſineſs along the whole courſe of

the paſſage from the glans to the bladder. He never had been infected with Gonorrhœa, and having had no connection with any other woman than his wife, of whom he could not entertain the leaſt ſuſpicion, he concludes his firſt letter by enquiring whether or not ſuch ſymptoms ever originate from other cauſes than intercourſe with an infected perſon, and at the ſame time wiſhed that ſuch medicines might be ſent him as would as quickly as poſſible put a ſtop to the diſcharge. In my anſwer to this, which I alſo preſerved, I mentioned ſeveral cauſes by which a diſcharge from the urethra may be excited, and eſpecially the effect of repeated intercourſe with women labouring under fluor albus, where the diſcharge is more acrid than uſual. I at the ſame time ſent him an aſtringent injection, deſiring that it might be uſed if the diſcharge did not ſoon diſappear. In a ſubſequent letter he informed me, that he had been perfectly convinced by my account of it that his diſeaſe was of an innocent nature; and as a proof

of

of it he mentioned, that it went entirely off in the courſe of eight or ten days, without the injection, or any other remedy, being employed. A ſight of this correſpondence, which I was enabled to ſhew, could alone remove the diſtreſs under which my patient had long laboured.

I have ſince that period had occaſion to know that her huſband has at different times had a return of the diſcharge from the urethra, in ſome inſtances from expoſure to much cold, fatigue, or wetneſs, and repeatedly from connection with his wife when ſhe laboured under fluor albus.

This happened with a patient who never before had any diſcharge from the urethra; but a running is more particularly apt to occur from cauſes of this kind, in ſuch as have been frequently liable to Gonorrhœa Virulenta. I know many of this deſcription who uniformly experience a return of the diſcharge on being expoſed to much bodily fatigue, particularly much riding on horſeback, or jolting in a carriage on a rough road, on their being overheated

with wine, or having more connection than uſual even with ſound women.

The irritation excited in the urethra by a ſtone in the bladder will, in ſome inſtances, induce a very copious diſcharge of matter. When this takes place from the bladder itſelf, the matter comes off mixed with the urine, and in no other manner; but when it proceeds from the urethra only, as often happens, it aſſumes all the appearances of Gonorrhœa Virulenta, and paſſes off whether any exertions be made to empty the bladder or not.

We are led to underſtand that people who are much employed in working among the warmer kinds of ſpices are very liable to a ſcalding in making water accompanied with a diſcharge of purulent-like matter from the urethra. It is more particularly apt to occur in thoſe who work chiefly among Cayenne pepper: Nay, it has been known to happen from a perſon carrying a few pounds of this article about with him for ſale.

The

The moſt frequent cauſe of ſtrictures in the urethra is Gonorrhœa Virulenta; but they alſo occur from other cauſes. They have been met with in all periods of life, even where patients have never had any previous diſcharge from the urethra. They are particularly apt to occur in people advancing in years, between the ſixtieth and ſeventieth year of age, and ſometimes later. A perſon who in his youth has ſuffered much with Gonorrhœa Virulenta, is very liable to be attacked about this period with ſtrictures in the urethra, but they likewiſe happen, as I have obſerved above, where no cauſe of this kind can be given for them; and in whatever manner they are induced, they are very conſtantly attended with a plentiful diſcharge of purulent-like matter.

In ſome, theſe ſtrictures have been attended with ſuch a concurrence of circumſtances, ſo ſimilar to thoſe which occur in Gonorrhœa, that the beſt practitioners have at firſt been deceived with them. Where the irritation in the urethra has been

been conſiderable, ſympathetic ſwellings have occurred in the glands of the groin; and one or both teſticles have ſwelled from the ſame cauſe.

It is generally known, that a diſcharge may at any time be excited from the urethra, by the uſe of ſtimulating bougies. This has in different inſtances been put in practice, where violent pain and other bad ſymptoms have been induced by the ſudden ſtoppage of a Gonorrhœa, but it has alſo been adviſed for the ſame purpoſe, that is, for exciting a diſcharge of matter, merely for the removal of pain, where neither Gonorrhœa nor any venereal ſymptom had ever taken place; and it has never failed when the ſtimulus is of a ſufficient ſtrength of being attended with this effect.

We are informed by authors, that gout has in ſome inſtances been productive of a diſcharge of puriform matter from the urethra; and I have not a doubt of its happening in rheumatiſm. Of this I have met with different well-marked inſtances, where

where a flow of matter from the urethra has alternated with pains in the knees, and other large joints; and among labouring people accuſtomed to work much in water, ſuch as ditchers, a diſcharge of this nature is by no means unfrequent. A patient of mine, who annually takes a great deal of exerciſe in following game, is always ſeized with a diſcharge of matter from the urethra when he goes in ſearch of ducks, by which his feet and legs are kept immerſed in water for ſeveral days together.

Other cauſes might be mentioned, by which a diſcharge from the urethra is at times produced, in every reſpect ſimilar to the matter of Gonorrhœa Virulenta, but theſe are ſufficient to ſhow that it may frequently occur from cauſes of the moſt innocent nature, and in perſons entirely blameleſs. Of this, all who have done much buſineſs in this branch of practice will be eaſily convinced, as inſtances of it are often occurring; but the diſtreſs which the want of diſcrimination

in

in matters of this kind is apt to excite, is often ſo great, not to individuals alone, but to the families with which they are connected; and I have happened to meet with ſo many diſagreeable occurrences of this kind, which might eaſily have been prevented, that I judged it proper in this manner to take particular notice of it.

The fact being eſtabliſhed that all the uſual ſymptoms of Gonorrhœa Virulenta may be excited by a variety of cauſes, may be conſidered as an additional proof of the matter of Lues Venerea, and of that diſeaſe being different; for although the matter produced in this manner in the urethra is ſo ſimilar to that of Gonorrhœa communicated by impure coition, that the one cannot be diſtinguiſhed from the other, yet no perſon ever imagined that the ſymptoms of Lues Venerea could be produced by any of theſe, nor by any cauſe whatever, but the abſorption of the matter of that diſeaſe itſelf.

It may alſo be remarked, that this opinion of the difference between theſe two

diseases is farther confirmed by the method of cure being the same, whatever may have been the cause of the running. Whether the matter discharged from the urethra be excited by infection communicated by a person labouring under Gonorrhœa Virulenta, or by any of the causes I have enumerated of Gonorrhœa Simplex, the method of treatment ought not to be varied. It is true that the latter will, for the most part disappear, whether any remedy be employed for it or not; but this will also happen with Gonorrhœa Virulenta. A cure, however, will be obtained much more speedily by a timeous and proper use of injections than in any other manner; and if this is admitted in one variety of the disease, it will be found equally applicable in the other. So far, indeed, as my observation goes, the discharge in Gonorrhœa Simplex is not more readily affected by the internal exhibition of medicines than we have shewn to be the case in Gonorrhœa Virulenta, while a proper application of an astringent injection very seldom

ſeldom fails in removing it. When, however, it ſeems either to depend upon general debility, or to be much connected with this ſtate of the ſyſtem, we find from experience that cold bathing, and whatever tends to reſtore the loſs of tone that has taken place, proves more obviouſly uſeful here than in Gonorrhœa Virulenta.

APPEN-

APPENDIX.

THIS Appendix contains formulæ of injections and other remedies for Gonorrhœa, enumerated in the preceding work.

No. 1. R. Calomel. pp^{tt}. ʒ ii.
Mucilag. gum arab. ℥ ii. M. et adde.
Aq. roſar. ℥ iv.

No. 2. R. Calomel. pp^{tt}. ʒ ii.
Balſam. copaib. ʒ i.
Vitell. ovi. ℥ ſs. M. et adde paulatim.
Aq. roſar. ℥ iv.

No. 3.

No. 3. R. Hydrargyr. puriſ. ʒii.
Mucilag. arab. ℥ii. M. S. A. et adde.
Aq. deſtillal. ℥iv.

Theſe formulæ of mercurial injections ſeem to act, as I have elſewhere obſerved, altogether as aſtringents. They excite little or no irritation, and when they prove ſucceſsful they commonly do ſo in the ſpace of a day or two. In all of them the mixture requires to be ſhaked when uſed; for even with the aſſiſtance of mucilage the mercury ſubſides ſo quickly that ſcarcely any of it will enter the ſyringe if this precaution be omitted.

Inſtead of mucilage, preſcribed in No. 3, I have ſometimes employed honey. This proves more expeditious for extinguiſhing the mercury, but the injection prepared with it excites more pain. Whether mucilage or honey be employed the mercury ſhould be very completely titurated.

No. 4. R. Lap. calamin pp^tt. ℈ii.
Balſam. copaib. ʒi.
Mucilag. arab. ℥ii. M. S. A. et adde,
Aq. fontan. ℥iv.

No. 5. R. Lap. tutiæ pp^tt. ℈ii.
Mucilag. arab. ℥ii. M. et adde.
Aq. fontan. ℥iv.

No. 6. R. Lap. calam. pp^tt. ℥iv.
Camphor. in pauxil. ſpirit. vin. rect. ſolut. ℥i.
Mucilag. arab. ℥iv. M. et adde aq. fontan. ℔ vi.
Ut fiat injectio.

In No. 4, the quantity of aſtringent earth is ſo ſmall that it may be well mixed with the liquid at the time of uſing it, but in Nos. 5. and 6. where there is a greater proportion of earth, after ſhaking the phial, it ſhould be allowed to ſubſide for the ſpace of a minute before filling the ſyringe. In this manner the finer particles only of the earth are thrown into

 the

the urethra; and it commonly proves as effectual as when the whole of it is used.

No. 7. R. Alumen. ʒ iss.
Solve in aq. distillat. ℥ viii.

No. 8. R. Cortic. quercus ℥ i.
Coq. in aq. fontan. ℥xx. ad. ℥ xvi. colaturæ adde.
Pulv. alumen. ʒ ii.

No. 9. R. Gall. quercus contus. ℥ i.
Coq. in aq. fontan. ℥ xxx. ad ℥ xx. cola et adde.
Pulv. alumen. ʒ iii.

No. 10. R. Kin. pulv. ʒ ii.
Mucilag. arab. ℥i. M. in mortario et adde aq. font. bul. ℥ x.

No. 11. R. Kin. pulv. ʒ ii.
Pulv. alumen. ʒ i.
Opii. ℈ ii.
Mucilag. arab. ℥ i. M. et adde.
Aq. fontan. bul. ℥ x.

No. 12.

No. 12. R. Opii ʒ i. solve in aq. font. ℥vi.

No. 13. R. Aq. rosar. ℥ vii. ss.
Tinctur. thebaic. ℥ ss. M.

In a great proportion of cases opium dissolved in water answers the purpose; but in a few instances I have found the spirituous tincture in the proportions here mentioned prove more effectual.

No. 14. R. Balsam. canadens.
Vel copaib. ʒ iii.
Vitell. ovi. ℥ ss. M. et adde.
Aq. rosar. ℥ vi.

When the balsam and yolk of the egg are previously well rubbed together, the water may be mixed with them so completely that no great degree of separation will afterwards take place; but to prevent any inconvenience which might ensue from the balsam getting to the top of the mixture, it should always be well shaked immediately before the syringe is filled with it.

No. 15. R. Cerufs. ʒ ii.
Mucilag. arab. ℥ ii. M. et adde.
Aq. fontan. deftil. ℥ vi.

No. 16. R. Sacch. faturni. ℈ i.
Solve in aq. deftil. ℥ viii.

No. 17. Aq. diftill. ℥ viii.
Acet. lythargyr. gutt. xxiv. M.

When faccharum faturni, or cerufſa acetata, as it is now termed, can be obtained pure, it is perhaps preferable for every purpofe to vinegar of lytharge, as being of a more determined ftrength; but it is frequently fo much adulterated that it will not diffolve but in very fmall quantities, even in diftilled water. Some of it indeed is fo very infoluble, that an ounce of water will not diffolve above a grain of it. By the addition of vinegar this may, it is true, be partly remedied; but vinegar, for many purpofes, is not admiffible in fuch quantities as would be neceffary for rendering this article much

more ſoluble than we uſually find it. Two, three, or more drops of the vinegar of lytharge may be uſed in every ounce of injection. Two drops often prove ſufficient, but many can bear eight or ten.

The following method of preparing vinegar of lytharge is the beſt I have met with. It is not very different from the extract of lead of goulard, but the ſtrength of it is more certain.

R. Lythargyri ℔. iii.
Acet. deſtillat. ℔. x. coq. leni igne
ad ℔. vi.
Cola.

Beſides boiling on a ſlow fire, during which time it ought to be well ſtirred with a wooden ſpatula, the whole ſhould be allowed to cool, and the fæces to ſubſide before ſtraining.

Lead diſſolved in this manner is eaſily mixed with water, and it proves to be a very convenient, as well as a very effectual method of uſing it.

No. 18. R. Zinci vitriolat. vulgo vitriol. alb. ʒ ſs.
Solve in aq. font. deſtillat. ℥ xvi.

No. 19. R. Zinci vitriolat. ℈ i.
Solve in aq. deſtillat. ℥ x. et adde.
Acet. lythargyri gutt. xx. ut. f. injectio.

In ſome caſes, where theſe articles have excited pain when uſed in this manner, they have been rendered perfectly mild by the addition of mucilage of gum arabic, and in others by camphor. Camphor does not diſſolve completely in any watery fluid, but being previouſly well rubbed with a few drops of ſpirit of wine, as much of it may be mixed with the water as to render the other articles much leſs pungent than they otherwiſe would be. The camphor, however, ſeparates in ſuch quantities as renders it neceſſary to filter the ſolution before uſing it.

Although a precipitation neceſſarily takes place from a mixture of vitriol and ſaccharum ſaturni, the following combina-

tion

tion of these two articles with opium gives a very useful form of injection.

No. 20. R. Vitriol. alb.
Sacchari saturni. a a ʒ ſs.
Camphor, ʒ i.
Opii. ℈ ii.
Solv. in aq. fontan. bul. ℥ xvi.
Cola.

No. 21. R. Fol. rosar. rub. ℥ ſs.
Alumen. pur. ʒ ii. infund. in aq. bul. ℥xvi. Cola. ut f. injectio.

No. 22. R. Balsam copaib.
Vitell. ovi. a a ℥ ſs. M. et adde.
Infus. rosar. rubr. ℥ xvi.

No. 23. R. Cap. papaver. alb. ℥ iv.
Rad. altheæ incis. ℥ i.
Infund. per noctem in aq. bul. ℔ ii.
Cola.

No. 24. R. Hydrargyr. muriat. vulg. mercur. sublimat. corrosiv. gr. i.

Solve in aq. fontan. ℥x.

No. 25. R. Mercur. ſublim. corroſ. gr. i.
Acet. lythargyr. gutt, xvi.
Aq. fontan. ℥ viii. M. S. A.

No. 26. Mercur. ſublimat. corroſ. gr. i.
Mucilag. arab. ℥ ii.
Aq. fontan. ℥ vi. M.

Corroſive ſublimate diſſolved in water proves to be the moſt certain, and perhaps in every reſpect the beſt form of a ſtimulating injection. Some have adviſed a much ſtronger ſolution than any of theſe, even to the extent of a grain of mercury to three or four ounces of water. I ſuſpect, however, that thoſe who recommend it of this ſtrength have never made uſe of it, at leaſt I have never met with any who could bear it. When the mercury is combined with water alone, as in No. 24. one grain to ten ounces proves ſufficiently ſtrong; but when mixed with ſaccharum ſaturni, with acetum lythargyri, or with mucilage, as in Nos. 25. and 26.

26. a grain may be added to ſix or eight ounces of water. When mixed with either of the two firſt of theſe articles, ſome part of the mercury precipitates, and is therefore loſt, and in the other the mucilage tends evidently to render it leſs active.

No. 27. R. Sal. ammon. crud. gr. x.
Solve in aq. font. ℥ x.

No. 28. R. Aq. fontan. ℥ x.
Spirit ſal. aromat. gutt. lx. M.

No. 29. R. Aq. fontan. ℥ x.
Sprit. corn. cervi gutt. lx. M.

No. 30. R. Formul. inject. No. 23. ℥ viii.
Lixiv. cauſtic. gutt. xx. M.

I have freqently found both the volatile and cauſtic alkali prove uſeful where other injections had failed, but we cannot with any certainty point out the ſtrength for any individual. While one is able to bear

bear ten drops to every ounce of water, others cannot bear above three or four: The ſtrength I have adviſed in the three preceding formulæ proves to be the beſt for general uſe, but patients are more eaſily affected with variety in the ſtrength of theſe injections, than of any other I have ever tried. The cauſtic alkali may be uſed in water alone; but it may be ventured upon in larger quantities, and with more ſafety, when combined with a mucilaginous infuſion.

No. 31. R. Ærug. pp^{tt}. g^{r}. viii.
Ol. oliv. Op^{t}. ℥iv. M.

No. 32. R. Ærug. pp^{tt}. ʒi.
Spirit. corn. cerv. ℥ iv.
Digere et cola.
R. Solut. ſupr. parat. gutt. xl.
Aq. diſtillat. ℥x. M.

Verdegris mixed with oil may be uſed with perfect ſafety of the ſtrength mentioned in No. 31. but as injections prepared

pared with oil prove dirty and difagreeable in the application, I commonly prefer the form of the remedy No. 32.

A much larger proportion of verdegris is commonly advifed, but when more is employed, it precipitates immediately on being added to the water. Even of this ftrength the precipitation cannot be prevented entirely but by adding about a half more of the volatile alkali to the filtered folution of the verdegris. After filtrating through paper, if two ounces of volatile alkali be added to it, no precipitation will take place if diftilled water is employed; but in this cafe, a greater quantity of the folution may be added to the fame quantity of water. Inftead of forty drops, forty-eight or fifty may be added to ten ounces of water.

No. 33. R. Aq. fontan. ℥x.
Tinctur. cantharid. gutt. xx. ad xxx. M.

The

The three following are prefcriptions for bougies.

No. 34. R. Emplaft. diachyl. fimpl. ℥ iv.
Cer. purifs. ℥ ifs.
Ol. oliv. op^t. ʒ iii.

No. 35. R. Emplaft. commun.
Spermat. cæt. a a ℥ iv.
Ol. oliv. op^t. ℥ fs.
Minii, ℥ fs. M.

No. 36. R. Emplaft. commun. ℥ vi.
Ceræ flavæ puriff.
Spermat. cæt. a a ℥ ii.
Ol. oliv. op^t. ℥ i.
Antimon. crud. pp^tt. ℥ fs. M. S. A.

Any of thefe prefcriptions afford a good compofition for bougies. They require to be flowly melted, and the different articles to be well mixed together. No. 34. is the fimpleft and perhaps the beft, the red lead in No. 35. and antimony in No. 36.

No. 36. being added chiefly for the purpoſe of affording a variety of colour. No. 37. is a compoſition for bougies recommended by Mr. John Hunter *. and No. 38. by Mr. Sharp †.

No. 37. Take of oil of olives three pints,
Bees wax one pound,
Red lead a pound and a half. Let them be boiled together on a ſlow fire for ſix hours.

No. 38. R. Diachyl. cum pice burgund. ℥ ii.
Argent. viv. ʒ i.
Antimon. crud. pp^{tt}. ℥ ſs.

The quickſilver to be previouſly diſſolved in balſam of ſulphur, or in honey, and added to the plaſter when melted in a moderate heat.

Any of theſe compoſitions, when boiled to a proper conſiſtence, will anſwer for

* See Treatiſe on the Venereal Diſeaſe, p. 137.

† See Critical Enquiry by Samuel Sharp, F. R. S. &c.

the

the formation of bougies, which is done in the following manner: While the liquid ſtill continues warm, let a piece of fine old linen be dipped in it, taking care with a ſpatula to cover the whole of it. If the melted liquor be of a proper heat, no more of the plaſter will adhere to the linen than is neceſſary; but as air bubbles are apt to riſe and produce inequalities on the ſurface of the cloth, the ſpatula made uſe of ſhould be ſomewhat warmer than the plaſter, and by means of it the whole ſhould be made as ſmooth as poſſible. The plaſter might indeed by ſpread entirely with the ſpatula; but this is not only attended with more trouble, but it does not cover the cloth with ſufficient equality.

The cloth being ſufficiently cold, may be immediately formed into bougies, and the whole ſhould, in the firſt place, be cut into the number that is meant to be made. The moſt exact method of doing this is by means of a ſharp pointed knife directed by a rule. The pieces ſhould be eleven inches

inches in length for bougies of a full ſize; but they ſhould likewiſe be kept of all the variety of lengths for ſtrictures of different heights in the urethra.

A variety of directions have been given for the form of bougies. Some adviſe them to be made nearly of an equal thickneſs to within an inch of their ſmalleſt end, and to taper from that to the point, while a great proportion of them are made to taper to within an inch or two of the point, and the reſt of them are cylindrical. I once thought that this laſt form of bougie was the beſt; but after a long courſe of experience in this branch of buſineſs, I am now convinced, that bougies, which taper equally from one end to the other, are the beſt, and that this form anſwers equally well for every variety of ſize. They are introduced more eaſily, and with leſs pain than any of the others; the linen ſhould therefore be cut in ſuch a manner as to give this form to the bougies. When rightly ſpread, and the linen ſufficiently fine, a well ſhaped bougie will be formed

of

of a ſlip of about five eighths of an inch broad at its largeſt end, and ſomewhat more than three eighths at the ſmalleſt end. This forms a bougie of a middle ſize; for particular purpoſes they muſt be conſiderably larger, and for others not ſo large by a great deal.

Theſe ſlips of linen are now to be rolled up as neatly as poſſible with the fingers; and in order to give them a ſmooth poliſhed ſurface, they ſhould be ſmartly rolled between a piece of ſmooth hard timber, and a plate of fine poliſhed marble: This being continued till the whole are rendered perfectly ſmooth and firm, and their points being properly rounded in order to facilitate their introduction, they are in this ſtate to be kept for uſe.

Theſe directions will convey an idea of the method of preparing bougies, but no ſurgeon can ever become ſo expert in forming them as thoſe artiſts who are daily accuſtomed to prepare them in large quantities. I muſt here again obſerve, however, in addition to what I had oc-

caſion

occasion to remark, in a former part of this work, that bougies, properly prepared with resina elastica, are preferable, in many circumstances, to such as are made with any kind of plaster. They not only prove much more durable, but more force can be employed with them, and as they do not break or crack by remaining in the urethra, they remain in it with less pain and inconvenience than any other bougie that has yet been invented.

Cat-gut has frequently been used as a bougie; but after various trials being given to it, I do not find that it answers the purpose: It cannot be made sufficiently smooth, and it sometimes swells so much as to excite a good deal of irritation; and lead, which was one of the first articles used for bougies, is so firm that it always creates much pain, while at the same time it is so apt to break that different instances having occurred of this happening in the urethra, it has now been long laid aside.

The ſix following preſcriptions are meant for the removal of warts and other excreſcences, and they anſwer equally well whether they proceed from Gonorrhœa or Lues Venerea. It would appear, however, that there is a material difference between the warty excreſcences which occur as a conſequence of theſe diſeaſes, and ſuch as we uſually meet with from other cauſes; for while the former are for the moſt part eaſily removed by any of theſe applications, even by the pulvis ſabinæ alone, the latter are ſeldom acted upon by any of them, if it be not by the ſtrong ſolution of corroſive ſublimate in No. 40. and of mercury and ſpirit of nitre, No. 41. both of which are poſſeſſed of a ſtrong degree of cauſticity.

No. 39. R. Sal-ammon. crud. ʒ i.
Solve in acet. diſtellat. ℥ ii.
Aq. fontan. ℥ iv.

No. 40. R. Hydrargyr. muriat. vulgo merc. ſublim. corroſ.

Sal

Sal-ammon. crud. a a. ℥ ſs.
Solve in aq. fontan. ℥iv.

No. 41. R. Argent. viv. ℥ i.
Solve in ſpirit. nitr. fort. ℥ii.

No. 42. R. Pulv. fol. ſabin.
Calomel. a a. ℥i. M.

No. 43. R. Pulv. fol. ſabin.
Mercur. ſublim. corroſ. a a. ʒiii.
Mercur. precip. rub. ʒi. M.

No. 44. R. Alumen. uſt.
Mercur. precip. rub. a a. ℥i. M.

The following form of decoction of ſarſaparella and mezereon is of a ſtrength which moſt people can bear; when a greater proportion of mezereon is added, it excites ſickneſs, and a very diſagreeable ſenſation in the throat. I mention it here as I have had occaſion to ſpeak of it in the preceding work; and I ſhall alſo have cauſe to refer to it when treating of a Lues Venerea.

THE ...

No. 45. R. Rad. ſarſæ ℥ ii.
Cortic. radic. mezer. ʒ iſs.
Coq. in aq. fontan. ℔ iii. ad ℔ ii.
Colaturæ, adde.
Syrup. altheæ ℥ i.

The following is the Decoctum Luſitanicum, or Liſbon diet-drink.

No. 46. R. Rad. ſarſaparil.
Santal. alb.
Rubr. a a. ℥ iii.
Rad. glycyriz.
Mezerei. a a. ℥ ſs.
Ligni rhodii.
Guagaci.
Saſſafras. a a. ℥ i.
Antimon. crud. ℥ ii. miſce, et infunde in aquæ fontanæ bullientis. ℔ x. per horas xxiv. dien, coque ad ℔ v. colaturæ capiat a ℔ iſs. ad ℔ iv. quotidie.

Vel R. Rad. ſarſaparillæ.
Ligni ſaſſafras.

Ligni

Ligni ſantal. rubri.
    Guagaci a a. ℥ iii.
Cortic. rad. mezer. ℥ i.
Semin. corriand. ʒ vi.
Coq. in aq. fontan. ℔ xx. ad ℔ x.
Sumat ℔ ſs. ter quaterve indies.

Unguentum e calce zinci.

No. 47. R. Olei olivarum opt. ℥ iii.
Ceræ albæ.
Sperm. cetæ a a. ʒ iii.
Leni calore liqueſc. dein adde.
    florum zinci ℥ ſs.

Unguentum e lapide calaminare.

No. 48. R. Olei oliv. opt. ℥ iii.
Ceræ albæ. ℥ iſs.
Sperm. ceti. ℥ ſs.
Lapid. calamin. pp^{tt}. ʒ v. M. S. A.

END OF VOLUME FIRST.